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**NASA Contractor Report 189554**

## **SOLAR EXPOSURE OF LDEF EXPERIMENT TRAYS**

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**BOEING DEFENSE AND SPACE GROUP  
Seattle, Washington**

**Contract NAS1-18224  
February 1992**



National Aeronautics and  
Space Administration

**Langley Research Center**  
Hampton, Virginia 23665-5225



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LONG DURATION EXPOSURE FACILITY  
MATERIALS SPECIAL INVESTIGATION GROUP

LDEF SUPPORTING DATA

SOLAR EXPOSURE OF  
LDEF EXPERIMENT TRAYS

by  
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BOEING DEFENSE AND SPACE GROUP  
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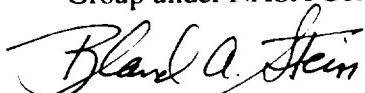
**FOREWORD**

The National Aeronautics and Space Administration Long Duration Exposure Facility (LDEF) was launched into low-Earth orbit (LEO) from the payload bay of the Space Shuttle Orbiter Challenger in April 1984. It was retrieved from orbit by the Columbia in January, 1990. The 57 LDEF experiments covered the disciplines of materials, coatings, and thermal systems; power and propulsion; space science; and electronics and optics. LDEF was designed to provide a large number of economical opportunities for science and technology experiments that require modest electrical power and data processing while in space and which benefit from post-flight laboratory investigations of the retrieved experiment hardware on Earth. Most of the the materials experiments were completely passive; their data must be obtained in post-flight laboratory tests and analyses.

The 5.8-year flight of LDEF greatly enhanced the potential value of most LDEF materials, compared to that of the original 1-year flight plan. NASA recognized this potential by forming the LDEF Space Environmental Effects on Materials Special Investigation Group (MSIG) in early 1989. MSIG was chartered to investigate the effects of the long LEO exposure on structure and experiment materials which were not originally planned to be test specimens, and to integrate the results of this investigation with data generated by the Principal Investigators of the LDEF experiments into the LDEF Materials Data Base.

When evaluating space environmental effects on materials and systems in LEO, one of the most important environmental parameters is the combination of electromagnetic radiation emanating from the sun directly on the materials and that reflected to these materials from the Earth. The radiation in the ultraviolet portion of the solar spectrum is of particular importance. Specific information on the accumulating exposure during the mission and on the total cumulative exposure of each of the LDEF experiment trays is required to define the performance of most LDEF materials and systems. Accordingly, MSIG decided to delineate solar exposures, in terms of equivalent sun hours, on each of the side rows and on the Earth and space ends of LDEF to provide the solar exposure supporting data to LDEF investigators for the detailed analyses of their experiments.

This document is the LDEF Solar Exposure Summary, prepared by the Boeing Defense and Space Group under NASA Contract NAS1-18224, Task 12 "LDEF Materials Data Analysis".



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## 1. INTRODUCTION

A primary objective of the Long Duration Exposure Facility (LDEF) mission was to study the effects of the space environment on various materials over an extended period of time. Two important contributors to materials degradation are solar radiation and atomic oxygen exposure. We have described atomic oxygen exposure calculations for LDEF in an unpublished report provided to NASA, titled Atomic Oxygen Flux and Fluence Calculation for the Long Duration Exposure Facility (LDEF) by R. J. Bourassa and J. R. Gillis, September 1991. Solar radiation exposure is covered herein.

The rate of accumulation of solar exposure in terms of equivalent sun hours depends upon the solar form factor for direct solar radiation and upon the earth albedo form factor combined with an appropriate value of albedo for earth reflected radiation. Form factors for the calculations were provided to Boeing by NASA in an unpublished report, titled Long Duration Exposure Facility Solar Illumination Data Package by W. M. Berrios and T. Sampair, 1991. Earth albedo has been determined from Nimbus 7 radiometer measurements and reported by Smith, et al. (Reference 1).

Tables and plots of equivalent sun hours exposure as a function of mission time for LDEF surfaces have been calculated and are described in this report . Exposures are expressed in cumulative equivalent sun hours for combined direct and earth reflected components of the solar radiation environment.

## 2. FORM FACTORS

The solar form factor for a surface is a function of its orientation with respect to the sun's rays. The earth albedo form factor for a surface on a spacecraft is a function of the position of the spacecraft relative to the earth's illuminated hemisphere and to the orientation of the surface with respect to the local vertical direction. Both form factors when averaged over a complete orbit are defined by the angle that the spacecraft's orbit plane makes with the sun's rays and the orientation of the exposed surface with respect to the spacecraft's heading and vertical coordinates.

The angle between the orbit plane and the sun's rays (Figure 1) is defined as  $\beta$ . The range of  $\beta$  is obtained by adding the inclination of the earth's equator with its orbit plane,  $23.5^\circ$ , to the

inclination of the spacecraft's orbit plane with the earth's equator,  $28.5^\circ$  for LDEF. Therefore,  $\beta$  varies from  $-52^\circ$  to  $+52^\circ$  for LDEF. Orbit averaged solar form factors (Table 1) and albedo form factors (Table 2) for each row and both ends of the LDEF vehicle as a function of  $\beta$  over the range  $-52^\circ$  to  $+52^\circ$  were provided by NASA for the calculations herein (Berrios and Sampair, op. cit.). Further, they have provided a table defining  $\beta$  angle (Table 3) for each day of the LDEF mission. Thus, the data for calculating both solar form factor and earth albedo form factor for LDEF on an orbit average basis were available.

All that is needed to proceed with the determination and summation of solar exposure in equivalent sun hours for LDEF is a value or values of earth albedo for use with the earth albedo form factor when calculating the earth reflected component of solar exposure. For each day of the mission earth reflected and direct solar exposure may then be added and accumulated to obtain total solar radiation exposure for each LDEF surface as a function of mission time.

The orbit averaged solar form factors (Table 1) and albedo form factors (Table 2), provided by NASA, were calculated for LDEF based on an estimated yaw angle of ten degrees with the ram vector shifted toward Row 10 from Row 9. After the NASA's researchers completed their calculation, it was determined that the yaw angle was eight degrees. In the work reported herein, solar exposures were first calculated for a yaw angle of ten degrees using the input data supplied, then results were corrected to a yaw angle of eight degrees by interpolation.

### 3. EARTH ALBEDO

Smith et al. (Reference 1) have published monthly average earth albedo values derived from Nimbus 7 short wave radiometer measurements from November 1978 to October 1985. The Nimbus 7 short wave radiometer covered the wavelength band from 0.2 to  $3.8 \mu\text{m}$ ; the spectral dependence of albedo within this band was not determined. The albedo values of Smith et al. are available for every five degrees of latitude and longitude, except for small regions near the earth's poles where some monthly data are missing. Rutan revised these data, extended them to July 1987, and made them available to Boeing in digital format. Rutan's revised and extended albedo data set was used in the calculations reported here.

The LDEF orbit is inclined  $28.5$  degrees to the equator and sweeps across the region from  $28.5^\circ$  N to  $28.5^\circ$  S latitude. Monthly average albedos for the region from  $30^\circ$  N to  $30^\circ$  S were calculated using Rutan's data. These average albedos for each month are displayed in

Figure 2. There are small seasonal albedo variations -- albedo tends to be higher in summer and winter than in spring and fall. However, these seasonal variations are quite small; their standard deviation is only 0.007 from the average of all albedos of 0.246. We, therefore, chose to use the average albedo of 0.246 for all dates. The error in earth reflected radiation caused by using this grand average albedo rather than the monthly average albedos should be less than 5 percent in any month and should average to near zero over any six month or longer period.

#### 4. DESCRIPTION OF COMPUTER PROGRAM

The authors have developed a computer program, SOLEXP, to calculate cumulative equivalent sun hours exposure for all LDEF rows, longerons, and earth and space ends. A brief outline of the program follows.

Execution of SOLEXP begins with reading flags to select direct solar radiation, earth reflected radiation, or both combined, and flags to control output. The user may input earth albedo and solar irradiance and wavelength limits for a chosen spectral band. Files of solar and albedo form factors are entered. If an earth reflected radiation sun hours calculation has been selected, the table of albedo form factors is multiplied by the albedo. If a combined solar and earth reflected equivalent sun hours calculation has been selected, the albedo form factors are multiplied by the earth albedo and added to the solar form factors to yield combined form factors. A file of daily  $\beta$  angles is read in.

After all input has been read in, daily form factors are interpolated for each surface as a function of daily  $\beta$  angle. Daily equivalent sun hours are calculated from the form factors and running sums are formed to keep the cumulative equivalent sun hours.

The amount of output is selected by an output flag. A short output comprises a table of cumulative equivalent sun hours for each LDEF surface for each day of the mission. A larger output includes this table plus daily equivalent sun hours, daily solar irradiances and fluences, and daily irradiances and fluences. Plots of cumulative equivalent sun hours may be printed.

For purposes of calculation we assumed that orbit averaged form factors and daily average form factors are the same. Implicit in this assumption is that there is an integral number of orbits per day. In fact, the LDEF orbital period varied from 94 minutes (15.3 orbits per day) at

the start of mission to 91 minutes (15.7 orbits per day) at the end. The error in rounding to the nearest integer number of orbits is a maximum of 3 percent in any day. Because each day starts at a different position in the orbit from the starting position of a day earlier, these errors should rapidly average out and should not be significant over periods greater than a few days.

The SOLEXP program calculates equivalent sun hours of direct solar radiation for each LDEF surface on a given day by multiplying the solar form factor for that surface by 24 hours/day. The form factor for a row or earth or space end on a given day is calculated as follows: First, the  $\beta$  angle for that day is determined from Table 3. Then, the form factor at that  $\beta$  angle is obtained from Table 1 with four-point Lagrangian interpolation. Daily equivalent sun hours are accumulated to yield equivalent sun hours of direct solar exposure as a function of mission time for each row. Equivalent sun hours for longerons are interpolated from the values for the rows, again using the Lagrangian interpolation. At this point, cumulative equivalent sun hours exposure are correct for a ten-degree yaw angle; they are subsequently adjusted to eight-degree yaw by way of the four-point Lagrangian interpolation formula.

Equivalent sun hours of earth reflected radiation are calculated in a similar manner except that the albedo form factor, interpolated from Table 2, is used for the calculation after multiplying it by an average earth albedo, 0.246, and by 24 hours/day. Likewise, total solar exposure is calculated with these same procedures except that solar form factor, is combined with the product of albedo form factor, average earth albedo and hours per day prior to the calculation.

## 5. CALCULATED RESULTS

Cumulative equivalent sun hours of total exposure have been calculated for each LDEF row and longeron and earth and space ends for each day of the mission. These data are presented in tabular form in the appendix. The user may use this table to calculate full spectrum solar fluence ( $\text{joule}/\text{cm}^2$ ) by multiplying cumulative equivalent sun hours by 492.48  $\text{joule}/\text{cm}^2\text{-hr}$ . This factor is based on a solar irradiance of 0.1368  $\text{watt}/\text{cm}^2$  (Reference 2). Similarly, the solar fluence in the 0.2 to 0.4  $\mu\text{m}$  band may be obtained by multiplying the cumulative equivalent sun hours by 39.24  $\text{joule}/\text{cm}^2\text{-hr}$ . This factor is based on a solar irradiance of 0.0109  $\text{watt}/\text{cm}^2$  in this band. Fluences for other spectral bands may be calculated in like manner.

Figure 3 summarizes cumulative equivalent sun hours exposure from direct solar and earth reflected radiation at each LDEF tray location. As may be seen from the figure, the highest exposure is to the space end and the lowest to the earth end. Of the 12 rows, the leading and trailing rows (9 and 3, respectively) receive the highest exposure, and those nearly parallel to ram direction (rows 6 and 12) receive the lowest exposure, about 60 percent of the leading edge exposure.

Figure 4 shows the buildup of cumulative equivalent sun hours with time for five typical trays. Build-up is quite linear with time for earth and space ends and rows 3 and 9 (trailing and leading edge rows), but rows 6 and 12 show a marked seasonal effect. Row 12 is oriented in a northerly direction and, hence, receives the most intense radiation in the northern hemisphere summer and the least intense radiation in the northern hemisphere winter. The opposite is true for row 6, which is oriented in a southerly direction. Seasonal effects decrease as row orientation becomes perpendicular to ram direction.

Solar exposure builds approximately linearly with time except for seasonal variations on northerly and southerly facing vertical surfaces. Figures 5 through 28 show total, direct solar, and earth reflected exposures over the mission for LDEF rows and longerons. Figures 29 and 30 show results for earth and space end surfaces. Earth reflected radiation accounts for 72 percent of the total radiation received by the earth end surfaces (Figure 30). This is a much higher proportion of reflected radiation than for any other location. Rows 1 through 12 receive from 9 to 15 percent of their exposure from earth reflected radiation. The space end surfaces are not exposed to earth reflected radiation.

Figure 31 shows a polar plot of cumulative equivalent sun hours at the end of the LDEF mission for vertical surfaces (rows and longerons). The exposure times are nearly symmetrical with respect to the direction of the ram vector. The polar plot displays the effect of yaw angle on calculated exposure times. Rows 9 and 3 lie on the z-axis and Rows 6 and 12 lie on the y-axis of the vehicle. The exposure pattern is skewed counterclockwise to these coordinates when viewed from above.

## REFERENCES

1. Smith, G. L., D. Rutan, and T. D. Bess, *Atlas of Albedo and Absorbed Solar Radiation Derived From Nimbus 7 Earth Radiation Budget Data Set - November 1978 to October 1985*, NASA Reference Publication 1231 (1990).
2. Jursa, A. S., Ed., *Handbook of Geophysics and the Space Environment*, p. 1-5, Air Force Geophysics Laboratory (1985).

TABLE 1  
ORBIT AVERAGED SOLAR FORM FACTORS

ROW	BETA ANGLE (DEGREES)						.
	-52	-40	-30	-20	-10	0	
1	0.0000	0.0000	0.0000	0.0290	0.0739	0.1301	0.2011
2	0.0000	0.0261	0.0597	0.0951	0.1306	0.1655	0.1997
3	0.1077	0.1412	0.1654	0.1856	0.2014	0.2127	0.2201
4	0.2506	0.2460	0.2407	0.2322	0.2199	0.2030	0.1831
5	0.4236	0.3234	0.2694	0.2242	0.1810	0.1388	0.0986
6	0.5456	0.4169	0.3145	0.2111	0.1059	0.0375	0.0000
7	0.5214	0.3987	0.3011	0.2024	0.1312	0.0746	0.0294
8	0.3575	0.2998	0.2667	0.2347	0.2016	0.1670	0.1319
9	0.2056	0.2166	0.2228	0.2248	0.2222	0.2148	0.2034
10	0.0626	0.1028	0.1332	0.1607	0.1849	0.2049	0.2220
11	0.0000	0.0000	0.0258	0.0610	0.0996	0.1402	0.1826
12	0.0000	0.0000	0.0000	0.0000	0.0000	0.0379	0.1067
EARTH	0.0386	0.0298	0.0260	0.0237	0.0226	0.0222	0.0237
SPACE	0.1955	0.2432	0.2750	0.2984	0.3127	0.3175	0.2984

TABLE 2  
ORBIT AVERAGED ALBEDO FORM FACTORS

ROW	BETA ANGLE (DEGREES)						
	-52	-40	-30	-20	-10	0	10
1	0.0449	0.0594	0.0697	0.0778	0.0837	0.0871	0.0878
2	0.0478	0.0619	0.0717	0.0793	0.0846	0.0873	0.0870
3	0.0517	0.0648	0.0737	0.0804	0.0846	0.0863	0.0854
4	0.0554	0.0673	0.0751	0.0805	0.0836	0.0841	0.0821
5	0.0603	0.0715	0.0785	0.0832	0.0853	0.0850	0.0820
6	0.0635	0.0745	0.0812	0.0855	0.0873	0.0865	0.0830
7	0.0634	0.0745	0.0814	0.0859	0.0878	0.0871	0.0837
8	0.0605	0.0723	0.0797	0.0848	0.0874	0.0873	0.0846
9	0.0551	0.0677	0.0759	0.0819	0.0854	0.0863	0.0846
10	0.0487	0.0619	0.0708	0.0776	0.0821	0.0841	0.0836
11	0.0452	0.0592	0.0689	0.0776	0.0800	0.0850	0.0854
12	0.0441	0.0586	0.0689	0.0771	0.0830	0.0865	0.0873
EARTH	0.1753	0.2175	0.2457	0.2664	0.2791	0.2834	0.2791

**TABLE 3**  
**BETA ANGLE (DEGREES) VS DAY OF LDEF MISSION**

Day	Apr-84	May-84	Jun-84	Jul-84	Aug-84	Sep-84	Oct-84	Nov-84	Dec-84	Jan-85	Feb-85	Mar-85
1	26.47	34.12	-5.42	28.00	21.56	-31.91	3.27	-10.33	-51.44	-3.19	-0.43	
2	23.13	37.72	-5.30	24.14	24.50	-32.24	-0.05	-7.22	-51.28	-6.25	3.42	
3	19.70	41.10	-4.71	20.21	27.16	-32.22	-3.59	-4.35	-50.36	-9.49	7.11	
4		16.24	44.16	-3.68	16.27	29.48	-31.68	-7.31	-1.77	-48.73	-12.86	10.61
5	12.81	46.81	-2.21	12.38	31.39	-30.59	-11.16	0.48	-46.49	-16.30	13.84	
6	10.61	48.95	-0.35	8.57	32.82	-28.99	-15.10	2.36	-43.73	-19.77	16.77	
7	7.34	50.80	1.89	4.89	33.72	-26.94	-19.08	3.84	-40.58	-23.19	19.33	
8	-5.47	4.22	51.39	5.20	2.87	33.91	-24.51	-23.05	4.89	-37.12	-26.87	21.48
9	-1.74	1.33	51.22	8.12	-0.51	33.28	-21.76	-27.39	5.53	-32.08	-30.01	22.50
10	2.12	-1.31	50.30	11.26	-3.65	32.07	-18.77	-31.16	5.53	-28.23	-32.89	23.91
11	6.08	-3.65	48.70	14.59	-6.49	30.32	-15.59	-34.74	5.06	-24.33	-35.45	24.79
12	10.08	-5.63	46.51	18.06	-8.99	28.07	-12.29	-38.06	4.12	-20.44	-37.59	25.13
13	14.08	-7.22	43.83	21.62	-11.10	25.40	-8.93	-41.02	2.73	-16.60	-39.25	24.93
14	18.03	-8.38	40.77	25.22	-12.80	22.36	-5.57	-43.54	0.92	-12.85	-40.34	24.18
15	21.88	-9.10	37.42	28.81	-14.04	19.02	-2.26	-45.52	-1.27	-9.26	-40.80	22.94
16	25.56	-9.34	33.88	32.32	-14.79	15.43	0.94	-46.88	-3.81	-5.86	-40.63	21.23
17	29.03	-9.10	30.21	35.69	-15.05	11.66	3.98	-47.55	-6.66	-2.69	-39.80	19.12
18	32.21	-8.38	26.49	38.85	-14.81	7.75	6.80	-47.51	-9.78	0.20	-38.35	16.64
19	35.02	-7.20	22.77	41.70	-14.09	3.77	9.36	-46.75	-13.12	2.76	-36.34	13.88
20	37.39	-5.58	19.09	44.16	-12.89	-0.25	11.59	-45.32	-16.64	4.96	-33.83	10.89
21	39.25	-3.55	15.52	46.13	-11.26	-4.25	13.45	-43.32	-20.29	6.75	-30.90	7.72
22	40.53	-1.15	12.09	47.51	-9.24	-8.19	14.89	-40.83	-24.03	8.11	-27.62	4.44
23	41.18	1.59	8.85	48.23	-6.87	-12.02	15.87	-37.94	-27.80	9.00	-24.07	1.11
24	41.18	4.62	5.85	48.24	-4.20	-15.69	16.37	-34.76	-31.55	9.42	-20.32	-2.22
25	40.54	7.91	3.12	47.53	-1.29	-19.13	16.36	-31.37	-35.21	9.35	-16.42	-5.50
26	39.30	11.39	0.70	46.13	1.82	-22.30	15.84	-27.85	-38.73	8.79	-12.43	-8.66
27	37.51	15.05	-1.36	44.13	5.08	-25.13	14.83	-24.25	-42.01	7.77	-8.41	-11.65
28	35.25	18.81	-3.03	41.59	8.42	-27.57	13.33	-20.65	-44.97	6.31	-4.39	-14.42
29	32.60	22.66	-4.27	38.63	11.79	-29.54	11.39	-17.10	-47.50	4.44	-16.89	-19.02
30	29.65	26.52	-5.08	35.32	15.15	-31.00	9.03	-13.64	-49.48	2.21	-20.75	-0.35
31		30.36			31.75		18.42					

TABLE 3 (CONTINUED)  
BETA ANGLE (DEGREES) VS DAY OF LDEF MISSION

Day	Apr-85	May-85	Jun-85	Jul-85	Aug-85	Sep-85	Oct-85	Nov-85	Dec-85	Jan-86	Feb-86	Mar-86
1	-22.03	38.22	22.26	-2.49	40.08	9.92	-26.94	10.73	-22.45	-46.04	6.88	-11.36
2	-22.81	35.86	26.12	-3.96	37.01	13.28	-29.29	8.47	-18.86	-48.30	4.96	-7.33
3	-23.08	33.13	29.96	-5.00	33.62	16.57	-31.17	5.83	-15.34	-49.96	2.68	-3.30
4	-22.81	30.11	33.73	-5.58	30.00	19.74	-32.52	2.86	-11.95	-50.94	0.08	0.67
5	-22.00	26.87	37.36	-5.69	26.20	22.72	-33.34	0.09	-8.75	-51.16	-2.79	4.53
6	-20.69	23.49	40.79	-5.33	22.30	25.44	-33.49	-3.36	-5.77	-50.61	-5.88	8.25
7	-18.89	20.03	43.91	-4.52	18.35	27.83	-33.05	-7.02	-3.06	-49.31	-9.14	11.75
8	-16.64	16.55	46.65	-3.26	14.41	29.83	-32.04	-10.81	-0.66	-47.36	-12.52	15.01
9	-13.68	13.12	48.88	-1.59	10.51	31.37	-30.51	-14.72	1.38	-44.84	-15.96	17.95
10	-10.67	9.77	50.51	0.47	6.71	32.39	-28.52	-18.68	3.04	-41.86	-19.41	20.52
11	-7.36	6.56	51.45	2.87	3.05	32.85	-26.13	-22.65	4.26	-38.54	-22.81	22.67
12	-3.82	3.54	51.63	5.58	-0.41	32.73	-23.41	-26.58	5.07	-34.95	-26.09	24.35
13	-0.10	0.70	51.05	8.55	-3.65	32.02	-20.43	-30.42	5.35	-31.19	-29.20	25.52
14	3.76	-1.85	49.75	11.74	-6.60	30.73	-17.26	-34.08	5.16	-27.31	-32.05	26.15
15	7.72	-4.00	47.80	15.10	-9.23	28.92	-13.96	-37.52	4.49	-23.39	-34.57	26.22
16	11.72	-5.78	45.31	18.59	-11.48	26.63	-10.60	-40.64	3.37	-19.48	-36.68	25.75
17	15.71	-7.15	42.39	22.15	-13.32	23.91	-7.23	-43.35	1.81	-15.63	-38.30	24.74
18	19.65	-8.08	39.14	25.74	-14.71	20.83	-3.90	-45.56	-0.15	-11.88	-39.35	23.25
19	23.48	-8.54	35.66	29.30	-15.62	17.46	-0.67	-47.17	-2.49	-8.28	-39.79	21.32
20	27.15	-8.53	32.02	32.76	-16.03	13.85	2.39	-48.11	-5.16	-4.87	-39.58	19.00
21	30.59	-8.04	28.29	36.06	-15.93	10.06	5.26	-48.32	-8.13	-1.71	-38.74	16.35
22	33.74	-6.82	24.54	39.12	-15.34	5.74	7.86	-47.81	-11.34	1.16	-37.28	13.45
23	36.51	-5.33	20.81	41.84	-14.27	1.75	10.14	-46.61	-14.75	3.71	-34.01	10.35
24	38.82	-3.41	17.16	44.15	-12.75	-2.27	12.06	-44.78	-18.32	5.88	-29.82	7.10
25	40.61	-1.11	13.63	45.94	-10.82	-6.27	13.58	-42.43	-22.00	7.65	-26.55	3.78
26	41.80	1.53	10.27	47.11	-8.53	-10.20	14.64	-39.65	-25.74	8.97	-23.01	0.44
27	42.35	4.48	7.13	47.61	-5.93	-14.01	15.23	-36.54	-29.50	9.82	-19.25	-2.88
28	42.24	7.69	4.24	47.40	-3.07	-17.64	15.31	-33.19	-33.20	10.19	-15.35	-6.10
29	41.49	11.11	1.65	46.49	0.00	-21.05	14.90	-29.68	-36.78	10.07	-9.18	-12.06
30	40.12	14.71	-0.61	44.91	3.23	-24.17	13.98	-26.08	-40.18	9.46	-43.30	-14.68
31	18.45				42.75	6.55	12.58	8.39				

TABLE 3 (CONTINUED)  
BETA ANGLE (DEGREES) VS DAY OF LDEF MISSION

Day	Apr-86	May-86	Jun-86	Jul-86	Aug-86	Sep-86	Oct-86	Nov-86	Dec-86	Jan-87	Feb-87	Mar-87
1	-16.97	42.81	11.86	4.53	45.89	0.59	-18.66	13.93	-33.42	-39.85	10.33	-24.83
2	-18.89	41.74	15.46	1.87	44.38	3.87	-22.08	12.97	-29.88	-42.96	9.36	-21.24
3	-20.39	40.08	19.18	-0.46	42.27	7.22	-25.22	11.53	-26.25	-45.70	7.93	-17.46
4	-21.41	37.92	22.98	-2.42	39.66	10.59	-28.00	9.64	-22.60	-47.96	6.09	-13.54
5	-21.93	35.34	26.82	-3.98	36.64	13.91	-30.36	7.34	-18.98	-49.63	3.88	-9.54
6	-21.92	32.43	30.63	-5.11	33.29	17.14	-32.24	4.67	-15.45	-50.62	1.34	-5.50
7	-21.38	29.27	34.37	-5.79	29.69	20.21	-33.58	1.67	-12.05	-50.86	-1.48	-1.48
8	-20.32	25.93	37.97	-6.00	25.91	23.05	-34.34	-1.60	-8.84	-50.42	-4.52	2.47
9	-18.76	22.48	41.35	-5.74	23.54	24.57	-34.51	-5.10	-5.85	-49.24	-5.95	6.32
10	-16.74	18.98	44.43	4.92	19.60	26.91	-34.07	-8.79	-3.14	-47.39	-9.24	10.00
11	-14.29	15.50	47.11	-3.71	15.64	28.85	-33.06	-12.61	-0.75	-44.95	-12.63	13.47
12	-11.48	12.09	49.27	-2.07	11.70	30.33	-31.38	-15.35	1.29	-42.04	-16.07	16.67
13	-8.36	8.79	50.82	-0.05	7.84	31.29	-29.33	-19.31	2.93	-38.76	-19.49	19.55
14	-4.96	6.11	51.67	2.32	4.08	31.70	-26.88	-23.28	4.15	-35.21	-22.85	22.05
15	-1.35	3.17	51.76	4.99	0.50	31.52	-24.10	-27.21	4.91	-31.46	-26.08	24.11
16	2.43	0.48	51.31	7.93	-4.45	30.77	-30.77	-31.04	5.21	-27.60	-29.10	25.67
17	6.34	-1.91	50.09	11.09	-8.83	29.45	-17.87	-34.72	5.04	-23.67	-31.85	26.75
18	10.31	-3.95	48.21	14.43	-11.30	27.61	-14.55	-38.16	3.85	-19.74	-34.25	27.29
19	14.31	-5.61	45.78	17.89	-13.38	25.30	-11.16	-41.28	1.78	-15.86	-36.22	27.26
20	18.29	-6.85	42.90	21.43	-15.02	22.57	-7.78	-43.99	-0.17	-12.07	-37.68	26.68
21	22.20	-7.65	39.68	25.00	-16.19	19.49	-4.45	-46.19	-0.10	-8.42	-38.56	25.58
22	25.98	-7.98	36.21	28.34	-16.87	16.11	-1.23	-47.79	-2.40	-4.96	-38.83	23.99
23	29.57	-7.84	32.57	31.98	-17.04	12.50	1.82	-48.70	-5.04	-1.73	-38.47	21.96
24	32.90	-7.22	28.84	35.27	-16.71	8.71	4.66	-48.88	-7.97	1.22	-37.47	19.56
25	35.90	-6.14	25.07	38.32	-15.88	4.79	7.23	-48.33	-11.15	3.85	-35.88	16.85
26	38.48	-4.62	21.32	41.04	-14.58	0.79	9.48	-47.07	-14.54	6.12	-33.76	13.90
27	40.58	-2.69	17.65	43.36	-12.85	-3.24	11.36	-45.20	-18.08	7.99	-31.16	10.75
28	42.11	-0.38	14.08	45.16	-10.74	-7.24	12.82	-42.79	-23.61	9.42	-28.16	7.48
29	43.01	2.28	10.68	46.37	-8.28	-11.18	13.83	-39.97	-29.20	10.38	4.15	0.80
30	43.24	5.23	7.48	46.91	-5.54	-15.01	14.37	-36.81	-32.89	10.85	-36.47	10.84
31				46.75	-2.56		14.40					-2.50

TABLE 3 (CONTINUED)  
BETA ANGLE (DEGREES) VS DAY OF LDEF MISSION

Day	Apr-87	May-87	Jun-87	Jul-87	Aug-87	Sep-87	Oct-87	Nov-87	Dec-87	Jan-88	Feb-88	Mar-88
1	-5.70	42.96	1.86	12.68	46.17	-10.02	-8.78	13.22	-41.10	-31.05	11.19	-27.73
2	-10.15	43.84	4.72	9.33	46.32	-7.37	-12.72	13.69	-38.00	-34.67	11.51	-24.43
3	-14.12	44.05	7.85	6.20	45.77	-4.47	-16.53	13.66	-34.64	-38.14	11.34	-20.87
4	-16.34	43.58	11.21	3.33	44.54	-1.37	-20.16	12.87	-31.12	-41.37	10.69	-17.10
5	-18.18	42.47	14.75	0.77	42.69	1.87	-23.55	11.73	-27.48	-44.27	9.56	-13.19
6	-19.59	40.77	18.44	-1.45	40.30	5.20	-26.64	10.12	-23.82	-46.75	7.99	-9.18
7	-20.53	38.57	22.21	-3.28	37.46	8.56	-29.36	8.08	-20.17	-48.69	6.02	-5.14
8	-20.96	35.95	26.04	-4.70	34.25	11.90	-31.65	5.65	-16.60	-49.93	3.69	-1.11
9	-20.86	33.00	29.86	-5.68	30.75	15.15	-33.44	2.86	-13.15	-50.54	1.05	2.87
10	-20.24	29.81	33.62	-6.27	28.13	18.27	-34.68	-0.23	-9.87	-50.39	-1.86	6.74
11	-19.10	26.44	37.25	-6.19	24.31	21.19	-35.33	-3.59	-7.59	-49.48	-4.97	10.45
12	-17.48	22.97	40.69	-5.65	20.40	24.11	-35.36	-7.15	-4.72	-47.86	-8.25	13.96
13	-15.40	19.46	43.85	-4.65	16.43	26.38	-34.79	-10.89	-2.14	-45.63	-11.63	17.20
14	-12.91	15.96	46.63	-3.21	12.47	28.24	-33.65	-14.75	0.10	-42.89	-15.06	21.10
15	-10.52	12.54	48.92	-1.37	8.57	29.62	-31.99	-18.68	1.97	-39.74	-18.49	23.50
16	-7.41	9.24	50.62	0.83	4.76	30.49	-29.86	-22.65	3.43	-36.28	-21.86	25.44
17	-4.03	6.11	51.63	3.36	1.09	30.79	-27.35	-26.59	4.73	-32.59	-25.09	26.88
18	-0.44	4.55	51.79	6.18	-2.39	30.52	-24.52	-30.46	5.10	-28.76	-28.13	27.79
19	3.33	1.77	51.01	9.24	-5.63	29.68	-21.45	-34.18	4.71	-24.84	-30.90	28.13
20	7.22	-0.72	49.52	12.50	-8.58	28.28	-18.21	-37.70	3.86	-20.89	-33.33	27.91
21	11.19	-2.88	47.41	15.90	-11.21	26.36	-14.86	-40.92	2.56	-16.97	-35.33	27.14
22	15.18	-4.67	44.79	19.40	-13.45	23.99	-11.46	-43.75	0.83	-13.13	-36.83	25.85
23	19.16	-6.05	41.76	22.96	-15.27	21.20	-8.07	-46.10	-1.28	-9.40	-37.77	24.09
24	23.07	-6.99	38.42	26.50	-16.63	18.08	-4.74	-47.87	-3.75	-5.85	-38.09	21.92
25	26.84	-7.47	34.86	29.98	-17.50	14.66	-1.53	-48.97	-6.54	-2.50	-37.78	19.39
26	30.43	-7.47	31.17	33.33	-17.87	11.02	1.50	-49.35	-9.60	0.58	-36.85	16.58
27	33.77	-7.01	27.40	36.48	-17.72	7.21	4.31	-48.97	-12.88	3.36	-35.32	13.53
28	36.77	-6.07	23.61	39.35	-17.07	3.27	6.84	-47.88	-16.34	5.80	-33.25	10.33
29	39.35	-4.69	19.87	41.84	-15.93	-0.74	9.04	-46.14	-19.95	7.85	-30.69	7.02
30	41.44	-2.88	16.21	43.86	-14.35	-4.77	10.87	-43.85	-23.63	9.47	3.67	3.67
31		-0.69	45.33	-12.37			-12.27				10.63	0.33

TABLE 3 (CONTINUED)  
BETA ANGLE (DEGREES) VS DAY OF LDEF MISSION

Day	Apr-88	May-88	Jun-88	Jul-88	Aug-88	Sep-88	Oct-88	Nov-88	Dec-88	Jan-89	Feb-89	Mar-89
1	-2.94	41.98	1.51	15.06	45.53	-10.81	-7.96	13.15	-42.26	-29.59	11.49	-29.49
2	-6.09	43.50	4.30	11.56	45.95	-8.18	-11.93	13.38	-39.25	-33.26	11.56	-24.65
3	-9.06	44.38	7.36	8.26	45.66	-5.30	-15.79	13.11	-35.95	-36.81	11.13	-19.26
4	-11.80	44.59	10.67	5.19	44.69	-2.21	-19.49	12.34	-32.46	-40.15	10.21	-15.40
5	-14.23	44.11	14.17	2.39	43.08	1.03	-22.98	11.08	-28.83	-43.20	8.84	-11.43
6	-16.32	42.98	17.83	-0.09	40.89	4.36	-26.18	9.37	-25.15	-45.85	7.04	-7.38
7	-18.01	41.26	21.58	-2.21	38.20	7.73	-29.03	7.22	-19.66	-48.00	4.86	-3.32
8	-19.25	39.03	25.40	-3.94	35.12	11.08	-31.46	4.69	-14.34	-49.53	2.34	0.71
9	-20.01	36.38	29.22	-5.24	31.72	14.35	-33.42	1.82	-10.98	-50.37	-0.47	4.66
10	-20.25	33.41	33.00	-6.09	28.08	17.49	-34.83	-1.35	-7.82	-50.45	-3.51	8.47
11	-19.97	30.19	36.66	-6.48	24.27	20.43	-35.65	4.77	-4.92	-49.76	-6.74	12.11
12	-19.16	26.80	40.14	-6.39	20.35	23.10	-35.86	-8.39	-2.31	-48.34	-10.10	15.51
13	-17.13	23.32	43.36	-5.84	16.69	25.45	-35.46	-12.17	-0.03	-46.27	-13.53	18.61
14	-15.15	19.79	46.21	-4.83	12.71	27.15	-34.83	-13.33	1.86	-43.66	-16.98	21.36
15	-12.76	16.28	48.20	-4.12	8.78	28.70	-33.44	-17.24	2.77	-39.15	-19.62	22.60
16	-9.99	12.85	50.13	-2.46	4.93	29.74	-31.54	-21.21	4.01	-35.63	-22.97	24.72
17	-6.90	9.54	51.39	-0.40	1.22	30.24	-29.22	-25.18	4.79	-31.89	-26.16	26.35
18	-3.54	8.71	51.92	2.00	-2.30	30.16	-26.54	-29.09	5.10	-28.02	-29.13	27.45
19	0.04	5.63	51.68	4.70	-5.60	29.51	-23.58	-32.89	4.93	-24.07	-31.80	27.98
20	3.80	2.77	50.68	7.67	-8.62	28.29	-20.40	-36.51	4.29	-20.11	-34.09	27.94
21	7.68	0.20	49.00	10.85	-11.31	26.55	-17.09	-39.87	3.18	-16.18	-35.92	27.33
22	11.64	-2.06	46.72	14.20	-13.62	24.32	-13.69	-42.88	1.63	-12.33	-37.22	26.19
23	15.64	-3.95	43.95	17.67	-15.52	21.67	-10.27	-45.44	-0.33	-8.61	-37.93	24.56
24	19.62	-5.43	40.81	21.21	-16.96	18.66	-6.89	-47.45	-2.66	-5.08	-38.01	22.48
25	23.53	-6.49	37.39	24.76	-17.91	15.33	-3.60	-48.82	-5.33	-1.76	-37.46	20.03
26	27.32	-7.08	33.77	28.28	-18.35	11.76	-0.46	-49.47	-8.29	1.28	-36.28	17.27
27	30.92	-7.04	30.03	31.68	-18.27	8.00	2.48	-49.37	-11.49	4.01	-34.51	14.26
28	34.26	-6.04	26.23	34.92	-17.68	4.10	6.37	-48.52	-14.90	6.38	-32.23	11.06
29	37.28	-4.77	22.44	37.90	-16.61	0.10	9.59	-47.00	-18.47	8.34	-22.14	9.87
30	39.88	-3.06	41.66	-15.07	-3.93	11.23	-44.87	-42.14	-25.87	-25.87	10.93	4.37
31		-0.96	44.45			12.43						0.99

TABLE 3 (CONTINUED)  
BETA ANGLE (DEGREES) VS DAY OF LDEF MISSION

Day	Apr-89	May-89	Jun-89	Jul-89	Aug-89	Sep-89	Oct-89	Nov-89	Dec-89	Jan-90
1	-2.33	42.40	3.98	8.16	46.19	-0.57	-23.41	11.38	-18.06	-51.11
2	-5.54	43.67	7.07	5.09	45.02	2.73	-26.40	9.25	-14.49	-51.43
3	-8.59	44.28	10.41	2.31	43.21	6.13	-28.99	6.71	-11.06	-50.92
4	-11.40	44.18	13.95	-0.14	40.82	9.55	-31.11	3.82	-7.83	-49.64
5	-13.93	43.41	17.64	-2.22	37.97	12.96	-32.70	0.61	-4.85	-47.65
6	-16.12	42.01	21.44	-3.89	34.73	16.28	-33.70	-2.86	-2.17	-45.07
7	-17.91	40.04	25.30	-5.13	31.20	19.45	-34.10	-6.55	0.17	-42.01
8	-19.26	37.60	29.16	-5.90	27.45	22.40	-33.88	-10.40	2.13	-38.59
9	-20.12	34.77	32.98	-6.20	23.55	25.08	-33.05	-14.36	3.66	-34.90
10	-20.46	31.65	36.68	-6.02	19.57	27.40	-31.66	-18.39	4.73	-31.04
11	-20.27	28.32	40.19	-5.36	15.56	29.29	-29.76	-21.50	5.33	-27.07
12	-18.53	24.85	43.42	-4.23	11.57	30.70	-27.43	-25.53	5.43	-23.07
13	-16.88	21.31	46.29	-2.68	7.65	31.56	-24.78	-31.37	5.04	
14	-14.77	17.76	48.67	-0.93	2.51	31.84	-20.24	-36.82	4.16	
15	-12.25	12.41	50.46	2.59	-1.06	31.52	-16.95	-40.07	2.80	
16	-9.36	9.08	51.25	5.36	-4.39	30.64	-13.55	-42.92	1.00	
17	-6.16	5.93	51.87	8.40	-7.43	29.18	-10.09	-45.25	-2.52	
18	-2.70	3.00	51.69	11.65	-10.14	27.18	-6.63	-46.96	-6.73	
19	0.96	0.35	50.74	15.07	-12.47	24.71	-3.25	-47.99	-9.93	
20	4.80	-1.98	49.09	18.60	-14.38	21.83	0.01	-48.26	-13.36	
21	8.74	-3.94	45.44	22.20	-15.81	16.85	3.09	-47.76	-16.98	
22	12.75	-5.50	40.89	25.82	-16.75	11.35	5.94	-46.55	-20.73	
23	16.77	-6.62	37.45	29.38	-17.17	7.45	8.49	-44.68	-24.57	
24	20.77	-7.28	33.80	32.83	-17.06	3.44	10.69	-42.26	-28.43	
25	24.67	-7.45	30.04	36.08	-16.44	-0.63	12.49	-39.40	-32.27	
26	28.42	-7.15	26.22	39.07	-15.32	-4.72	13.85	-36.19	-36.00	
27	31.96	-6.36	22.40	41.69	-13.74	-8.75	14.72	-32.75	-39.56	
28	35.21	-5.10	18.63	43.85	-11.74	-12.70	15.09	-29.14	-42.85	
29	38.09	-3.41	14.97	45.45	-9.36	-16.50	14.93	-25.45	-45.76	
30	40.51	-1.31	11.47	46.40	-6.67	-20.09	14.25	-21.74	-48.19	
31				46.66	-3.72		13.06		-50.01	

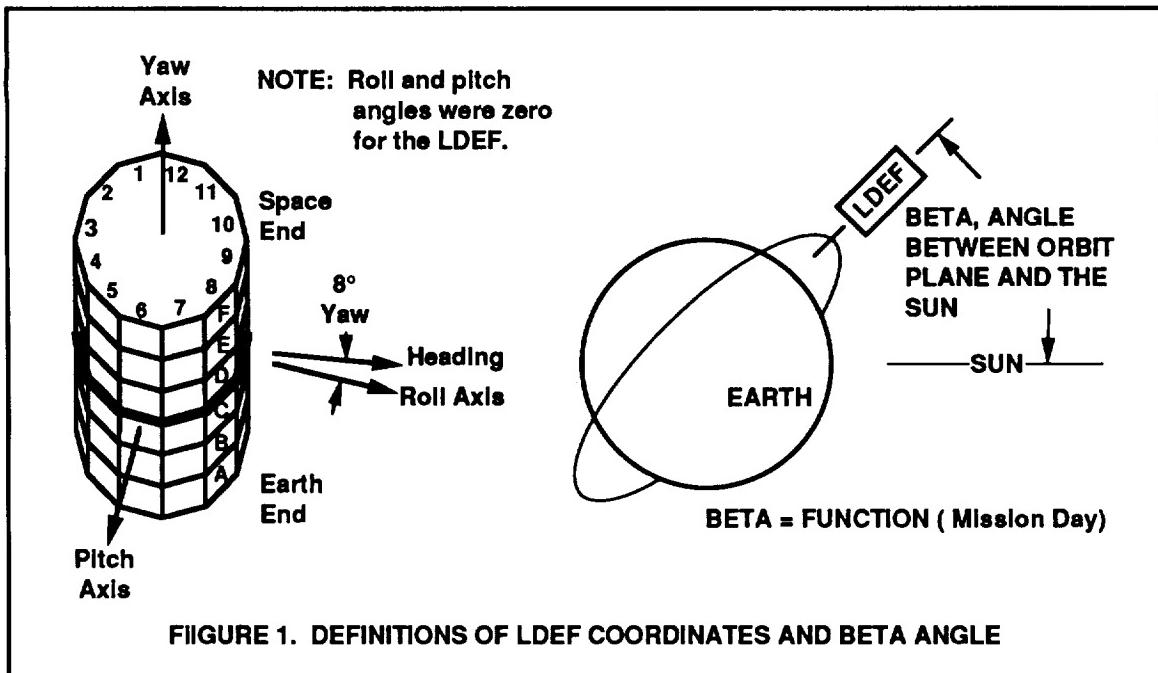


FIGURE 1. DEFINITIONS OF LDEF COORDINATES AND BETA ANGLE

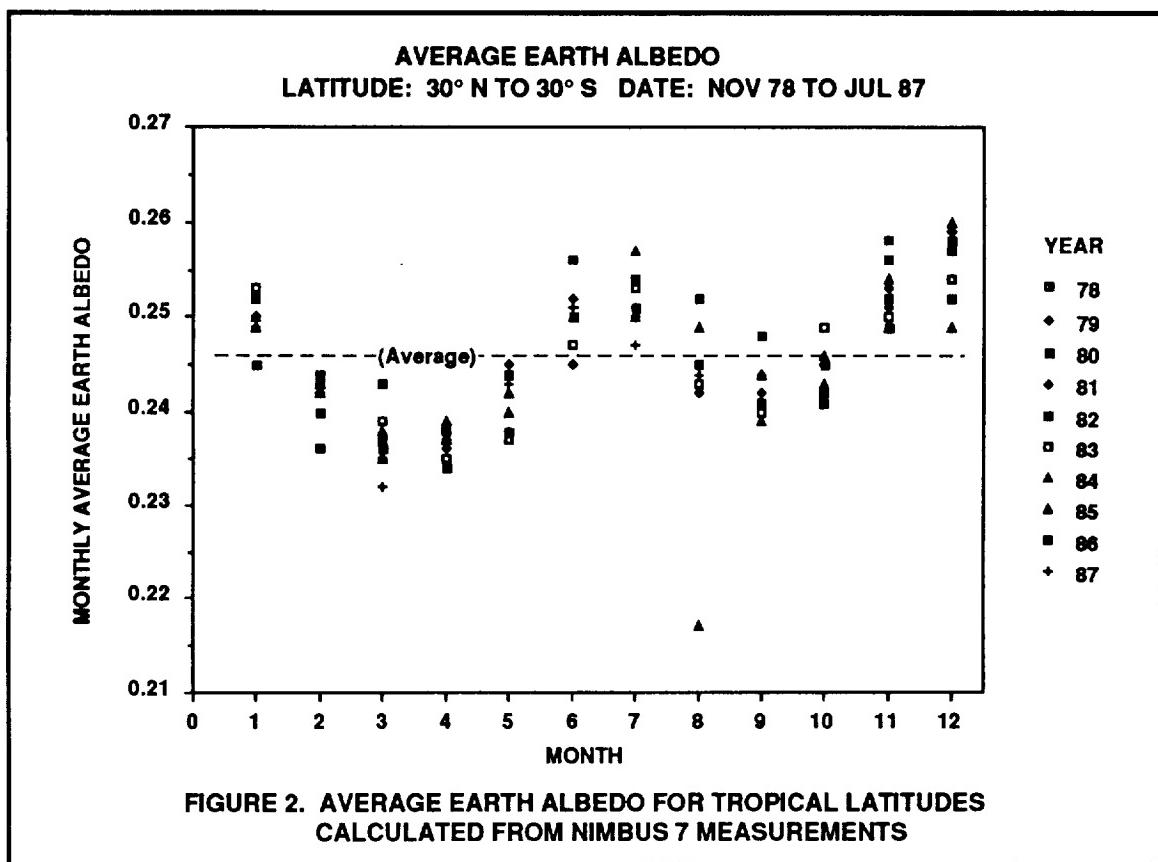
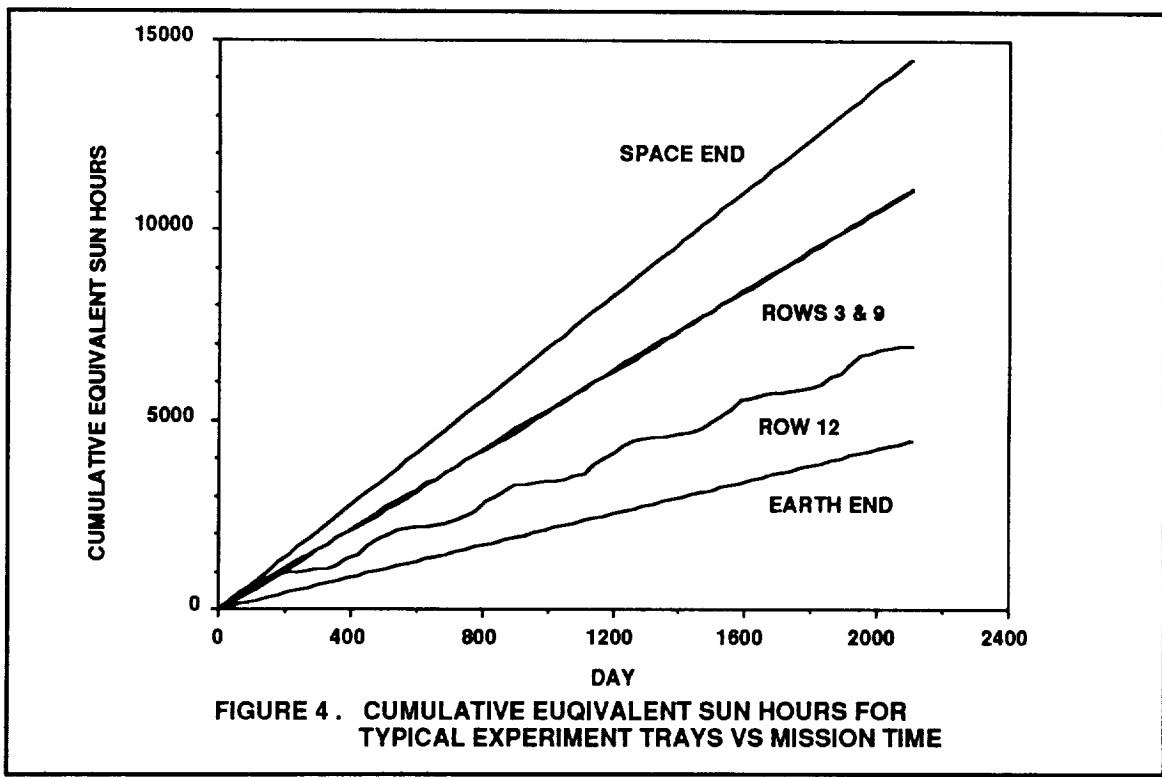
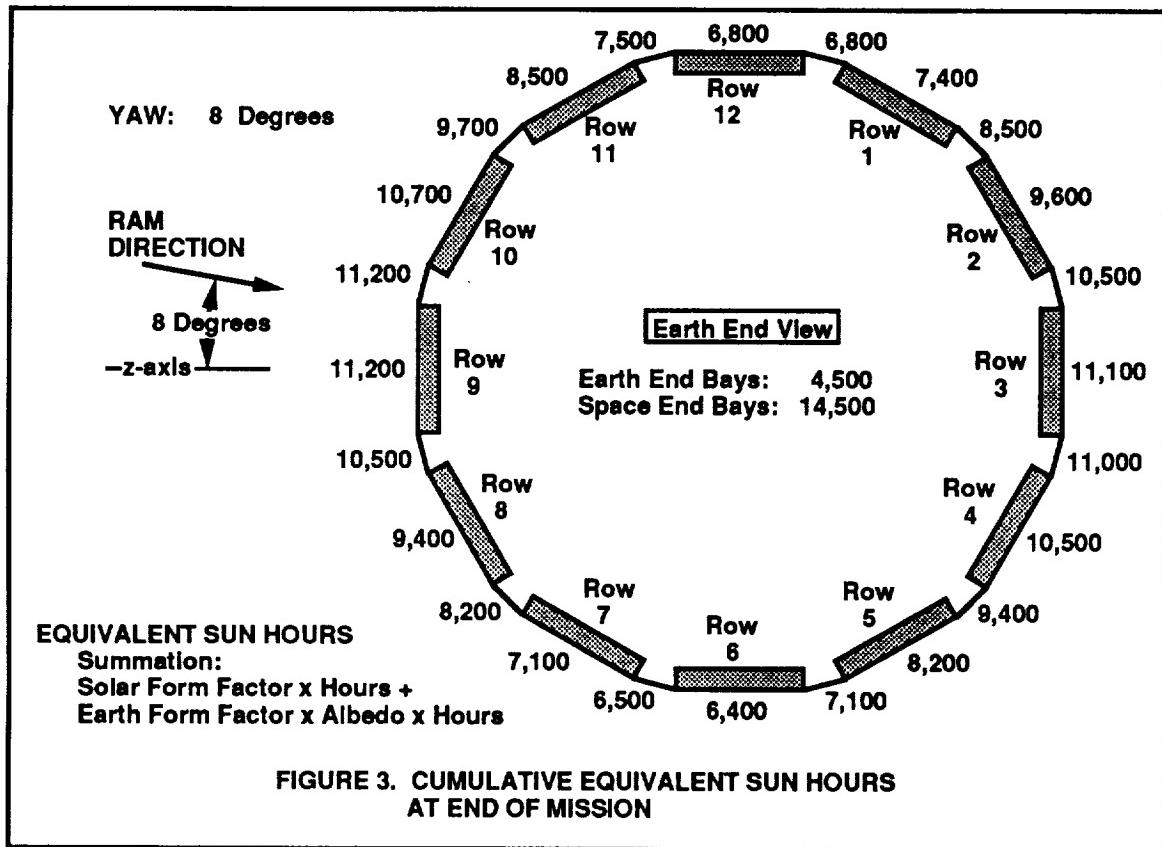


FIGURE 2. AVERAGE EARTH ALBEDO FOR TROPICAL LATITUDES  
CALCULATED FROM NIMBUS 7 MEASUREMENTS



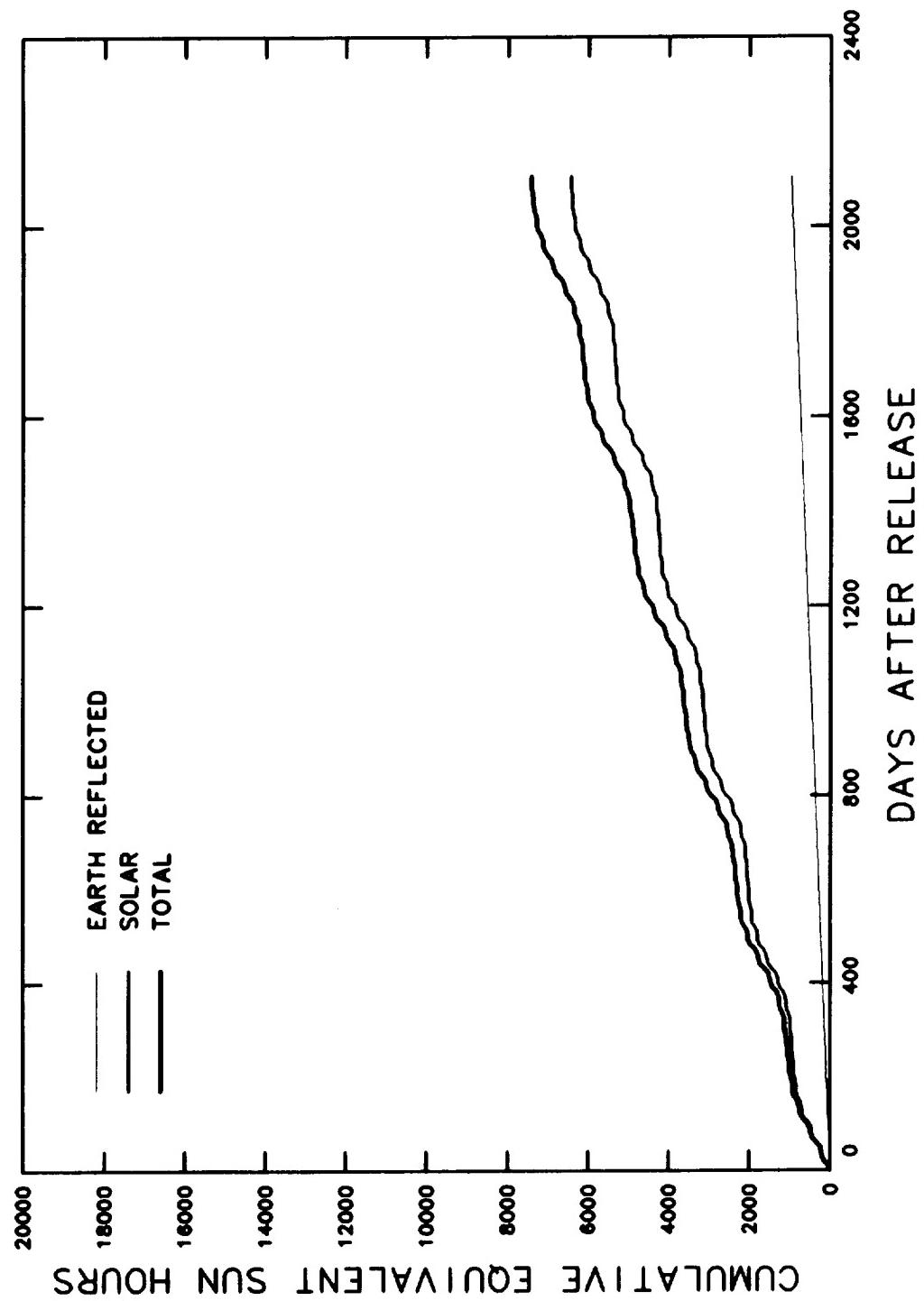


FIGURE 5. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF ROW 1 VS MISSION TIME.

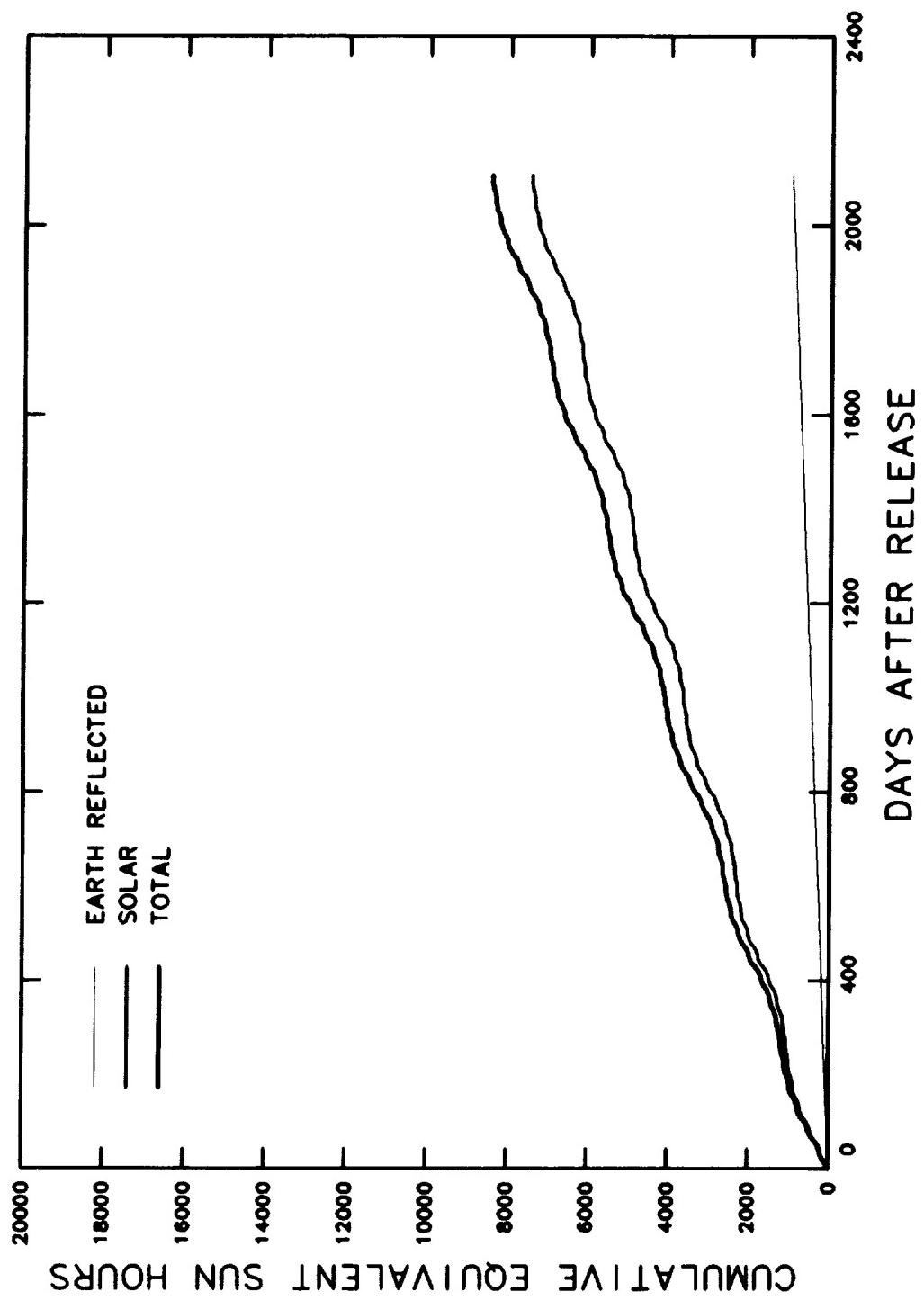


FIGURE 6. CUMULATIVE EQUIVALENT SUN HOURS  
FOR LDEF LONGERON 1-2 VS MISSION TIME.

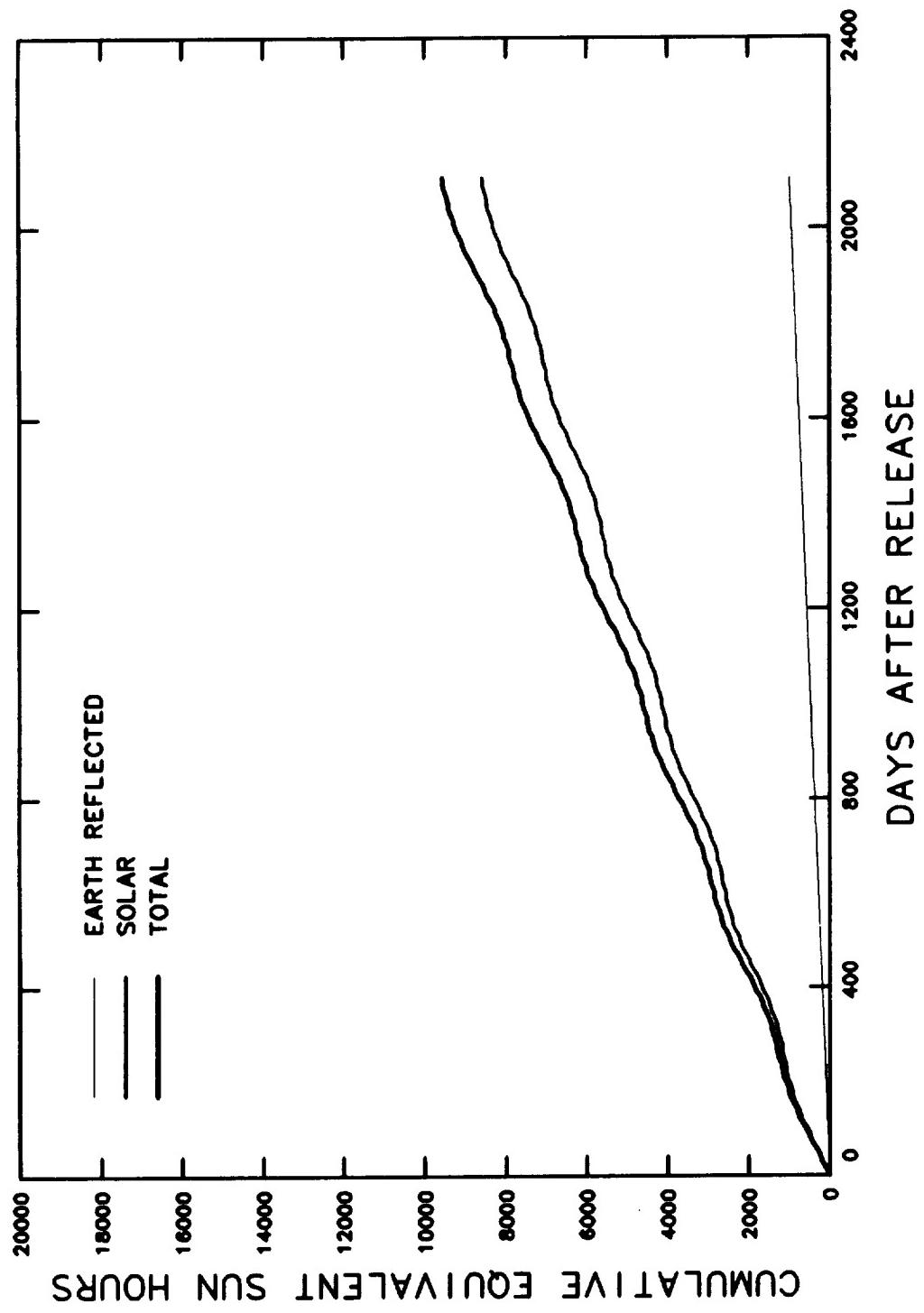


FIGURE 7. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF ROW 2 VS MISSION TIME.

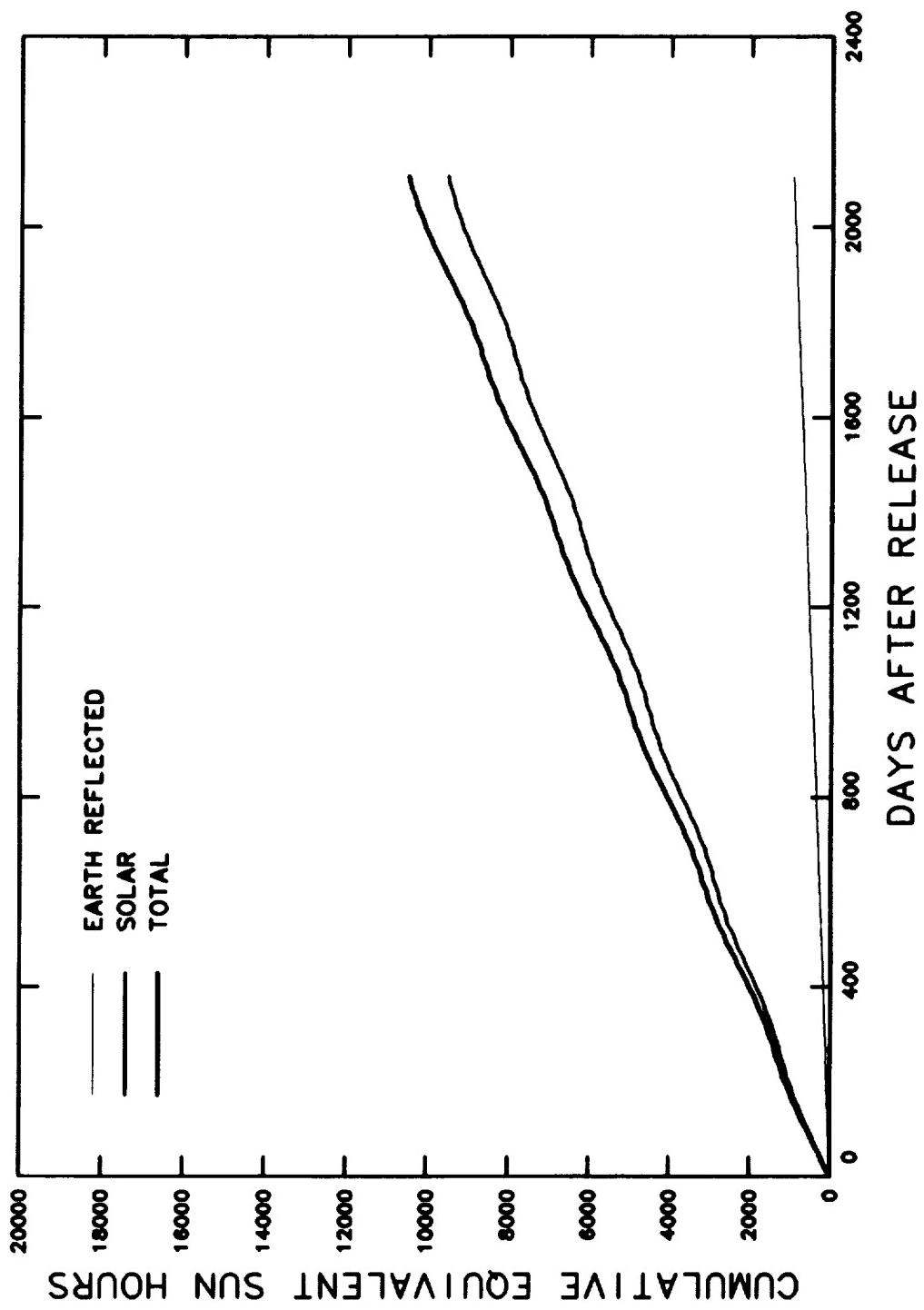


FIGURE 8. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF LONGERON 2-3 VS MISSION TIME.

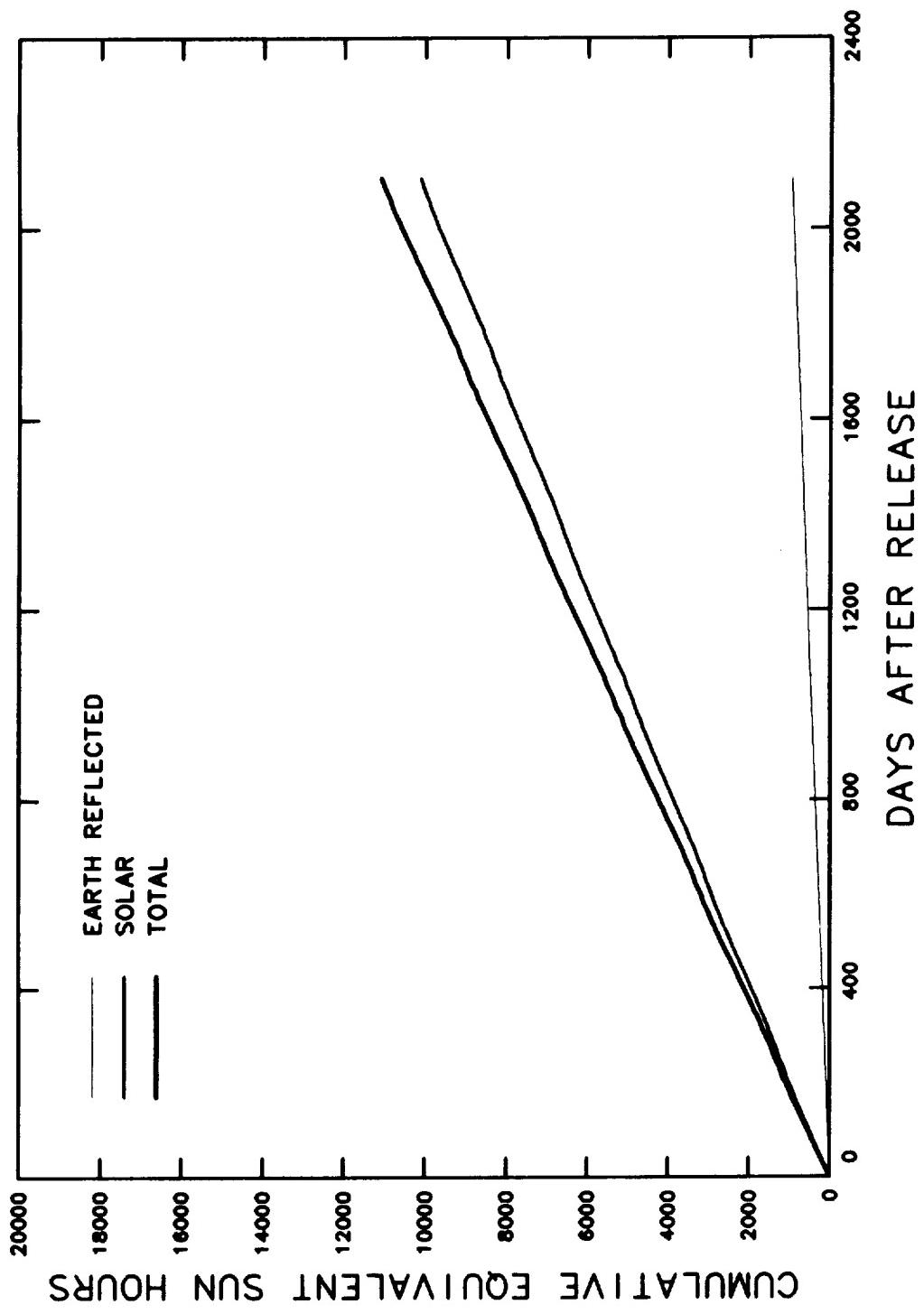


FIGURE 9. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF ROW 3 VS MISSION TIME.

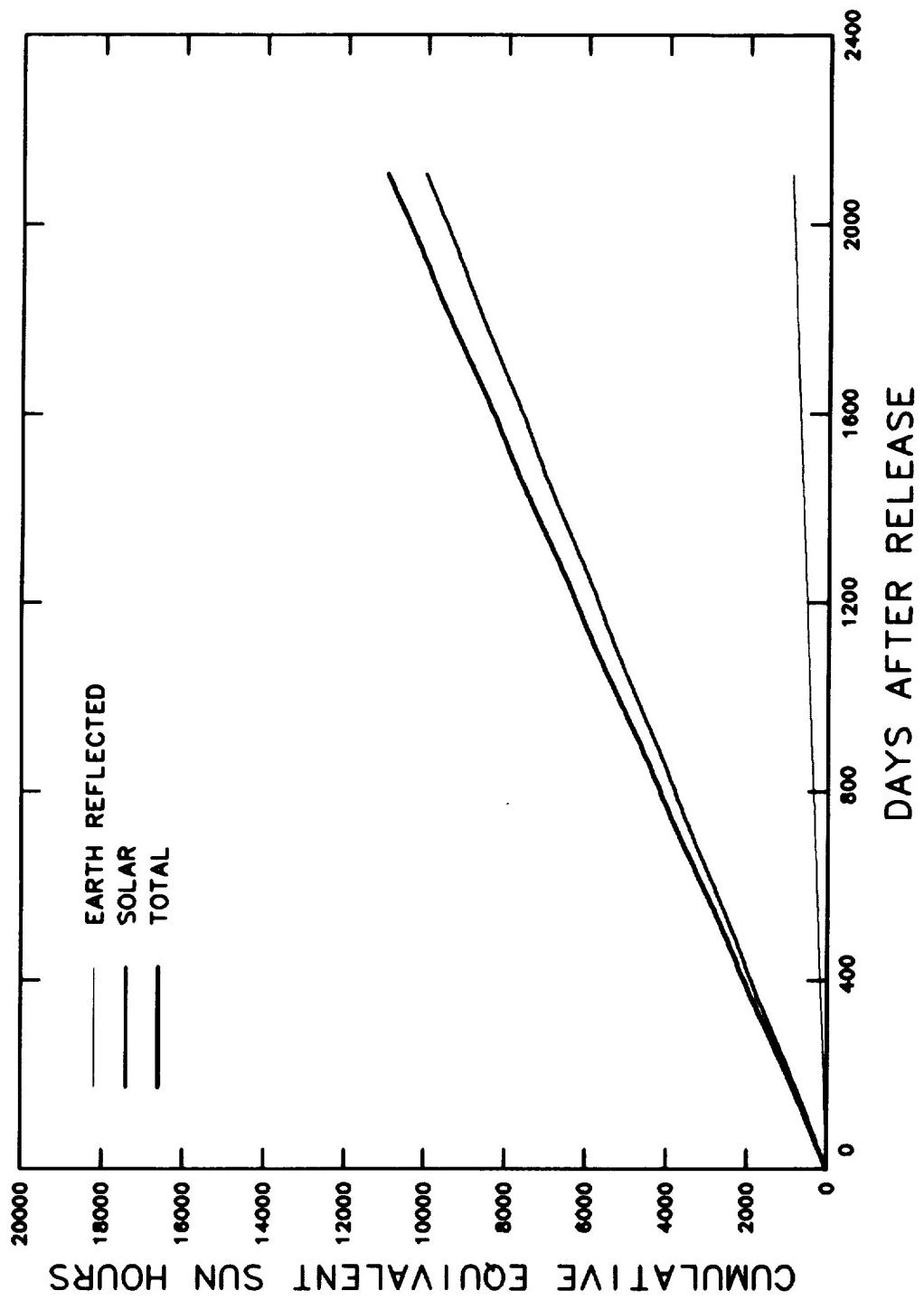


FIGURE 10. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF LONGERON 3-4 VS MISSION TIME.

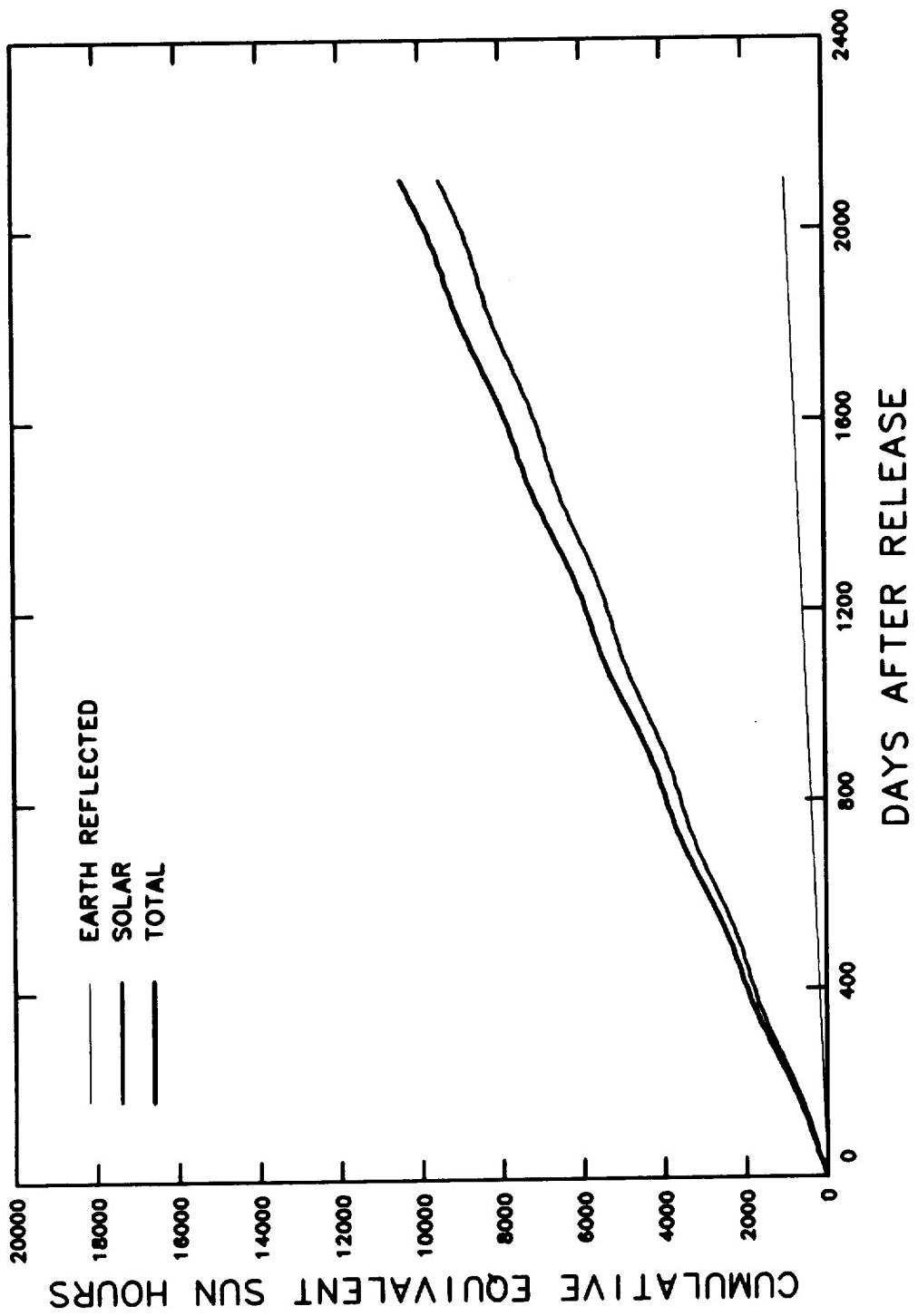


FIGURE 11. CUMULATIVE EQUIVALENT SUN HOURS  
FOR LDEF ROW 4 VS MISSION TIME.

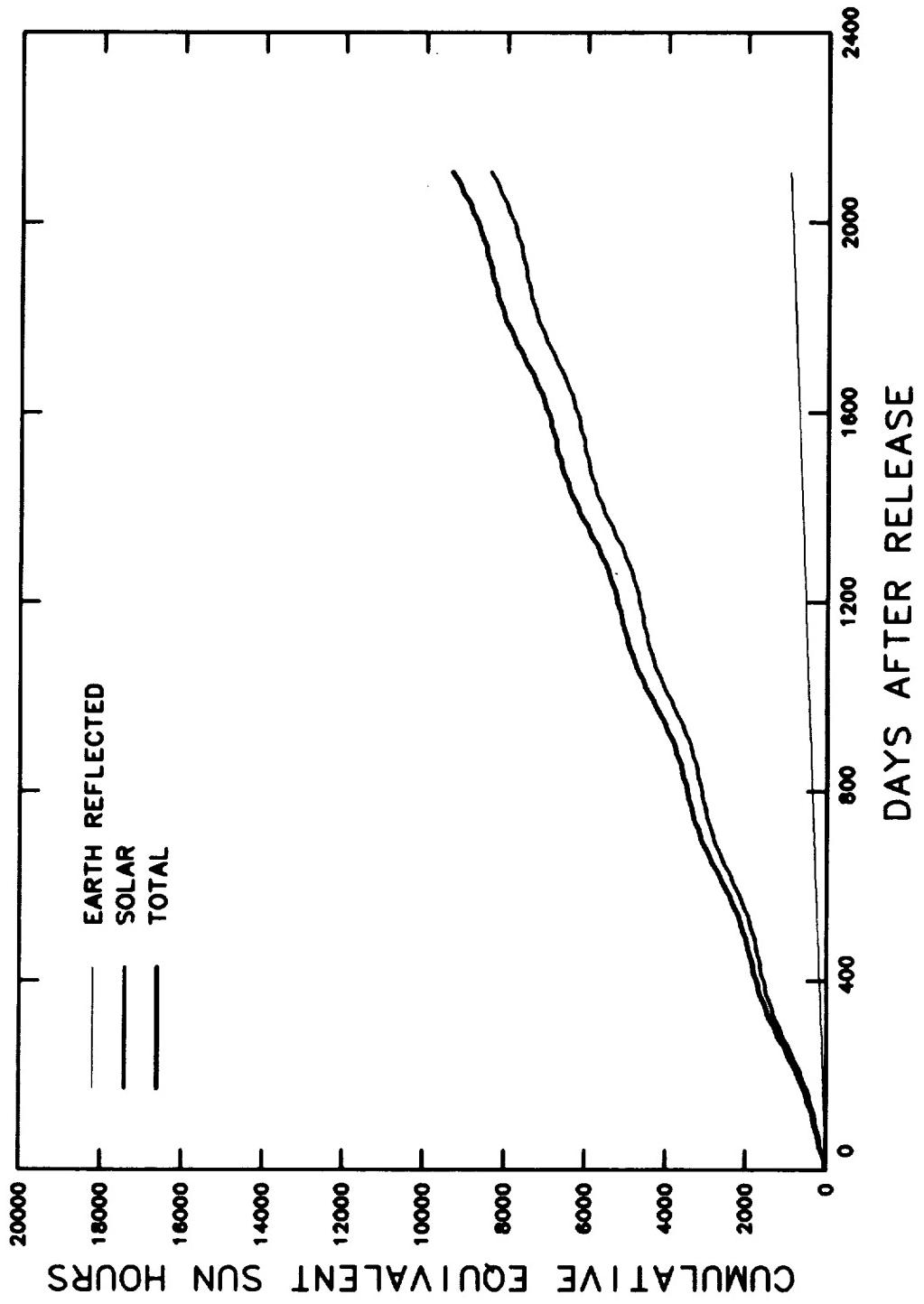


FIGURE 12. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF LONGERON 4-5 VS MISSION TIME.

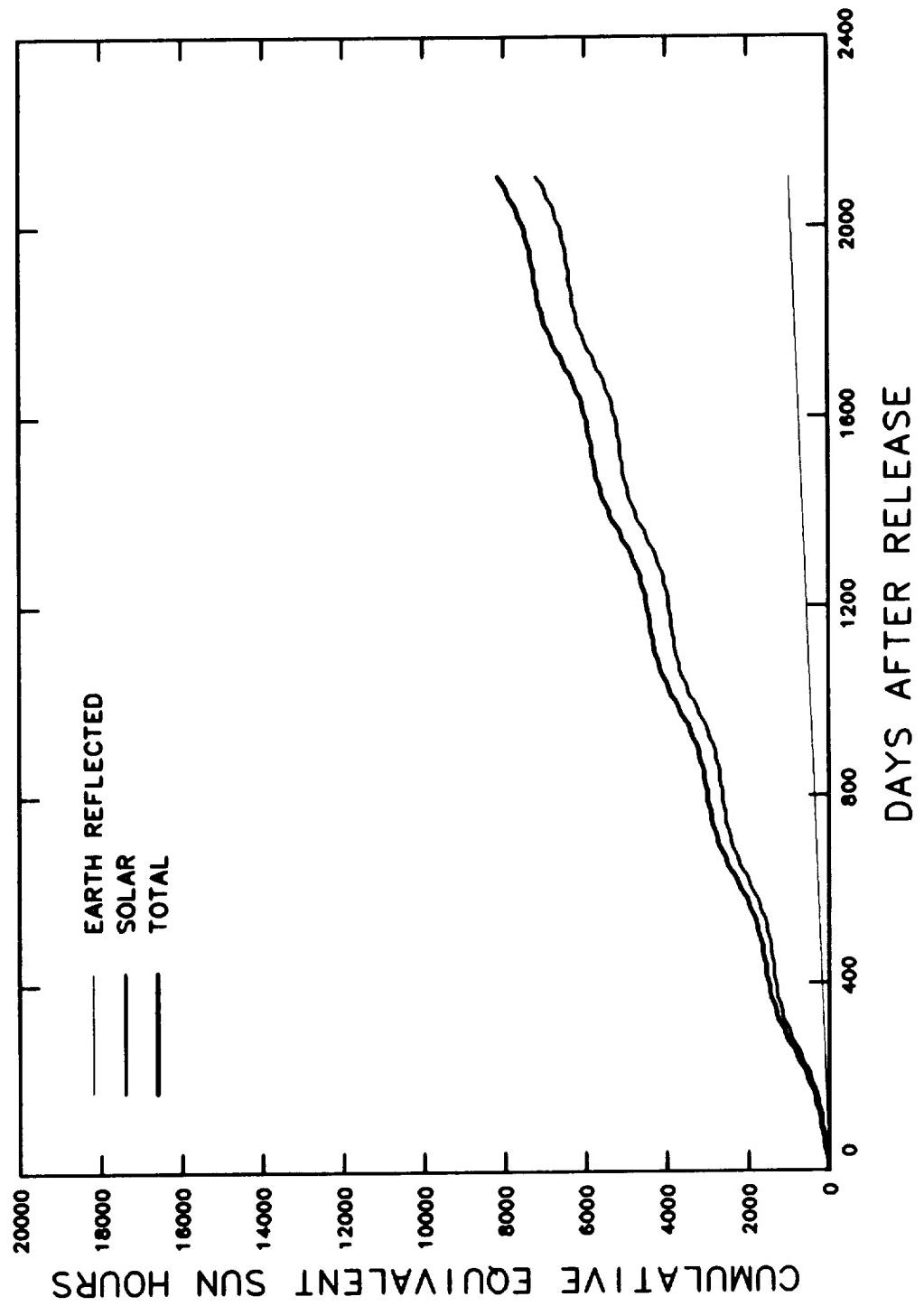


FIGURE 13. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF ROW 5 VS MISSION TIME.

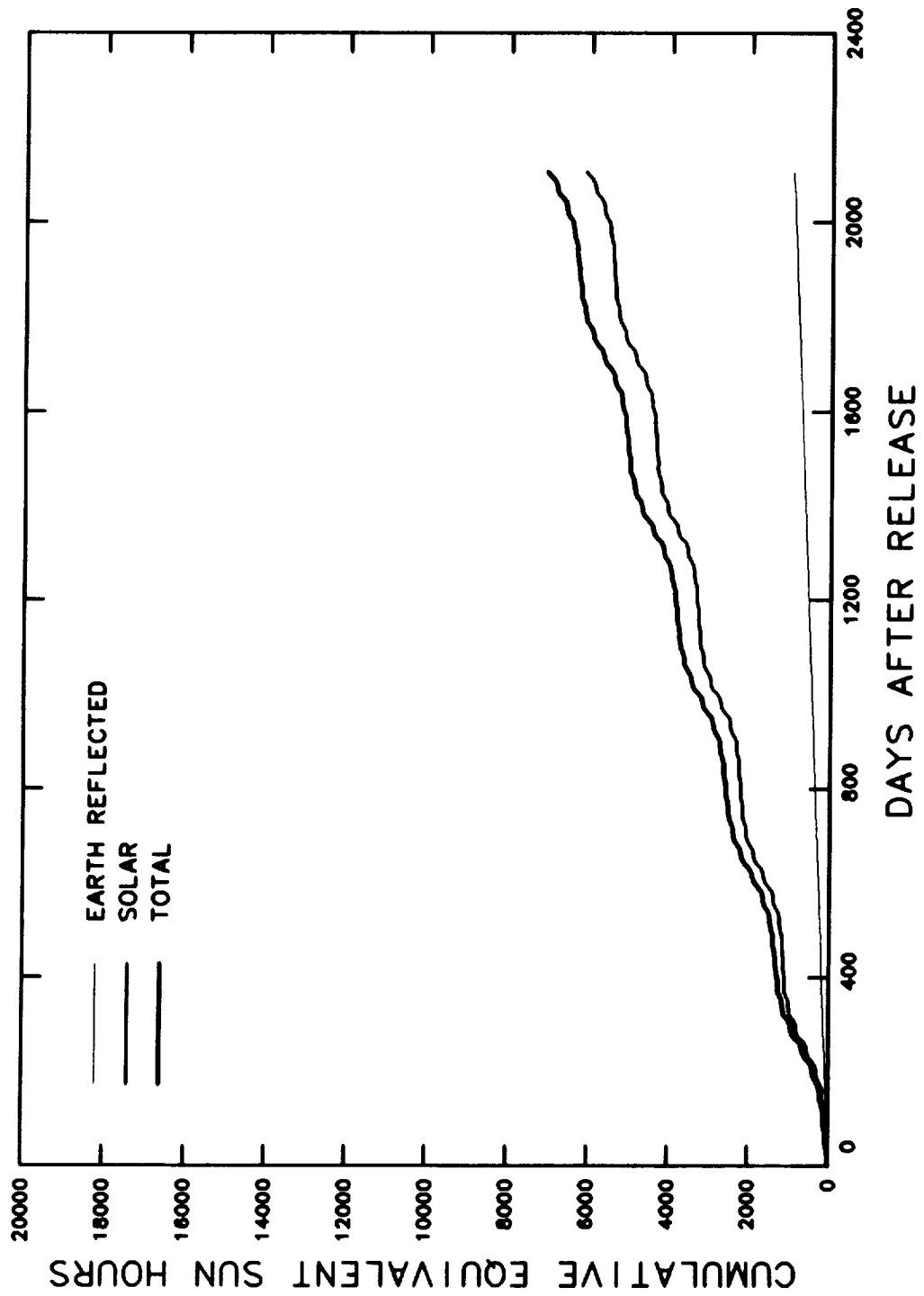


FIGURE 14. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF LONGERON 5-6 VS MISSION TIME.

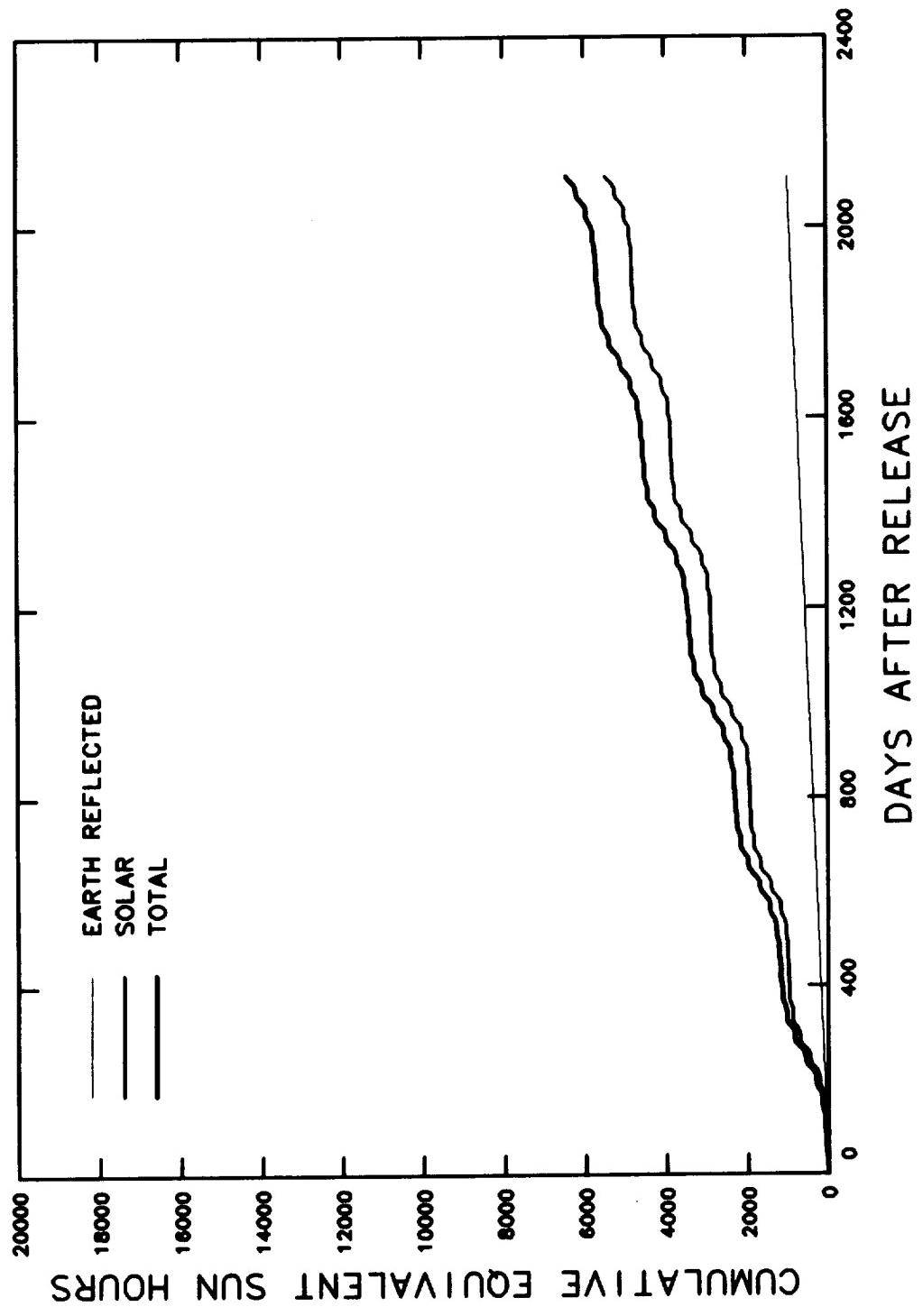


FIGURE 15. CUMULATIVE EQUIVALENT SUN HOURS  
FOR LDEF ROW 6 VS MISSION TIME.

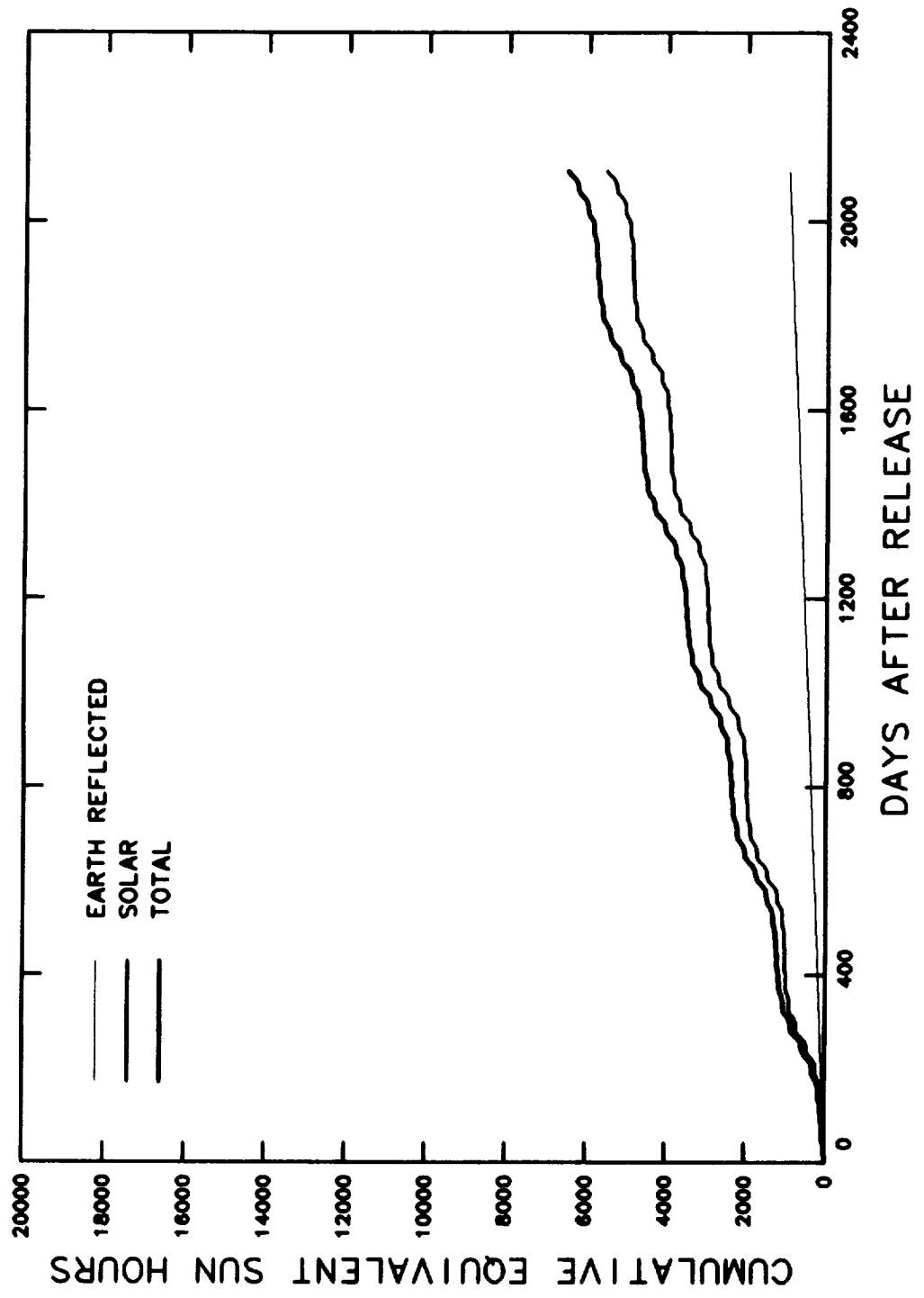


FIGURE 16. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF LONGERON 6-7 VS MISSION TIME.

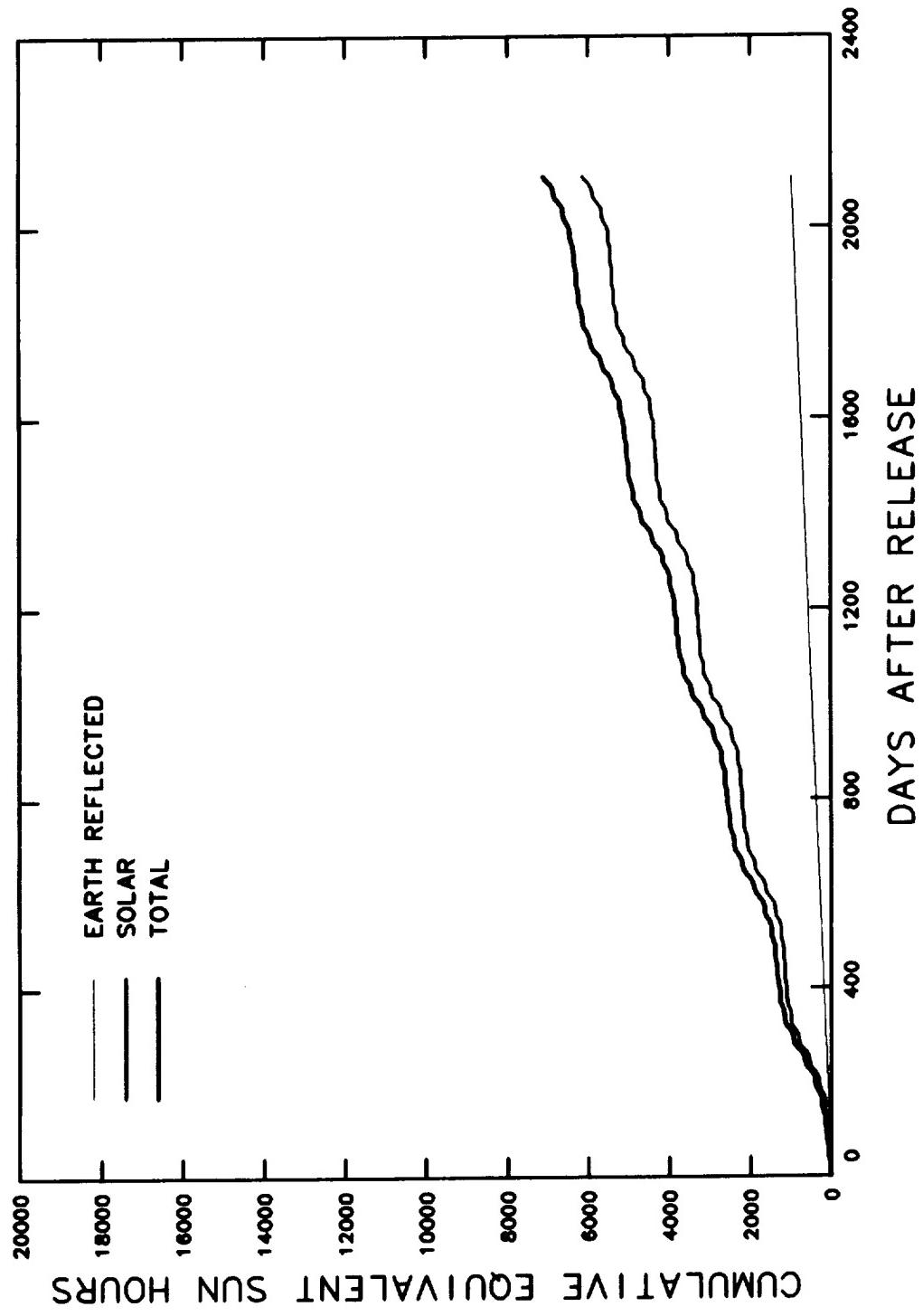


FIGURE 17. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF ROW 7 VS MISSION TIME.

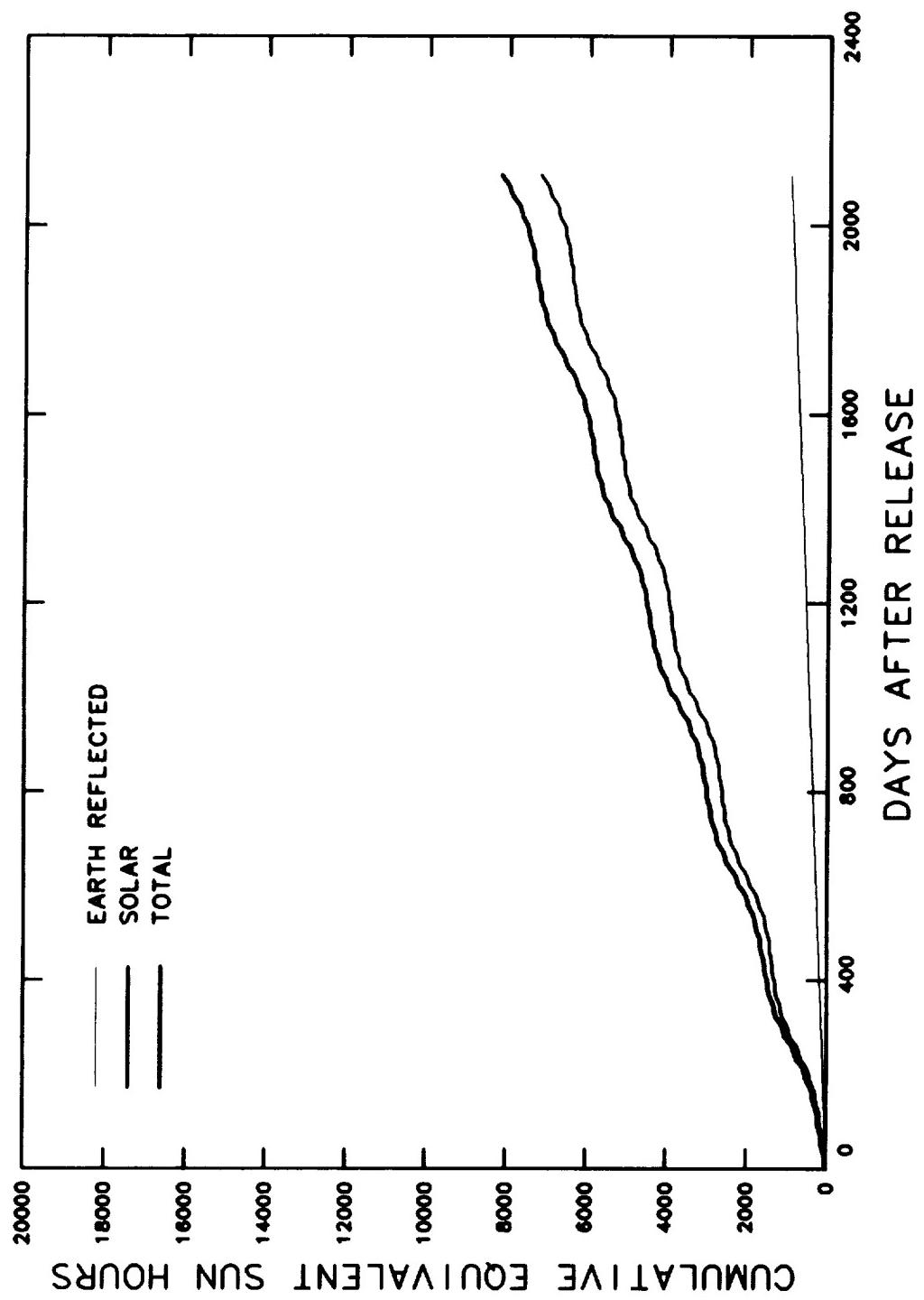


FIGURE 18. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF LONGERON 7-8 VS MISSION TIME.

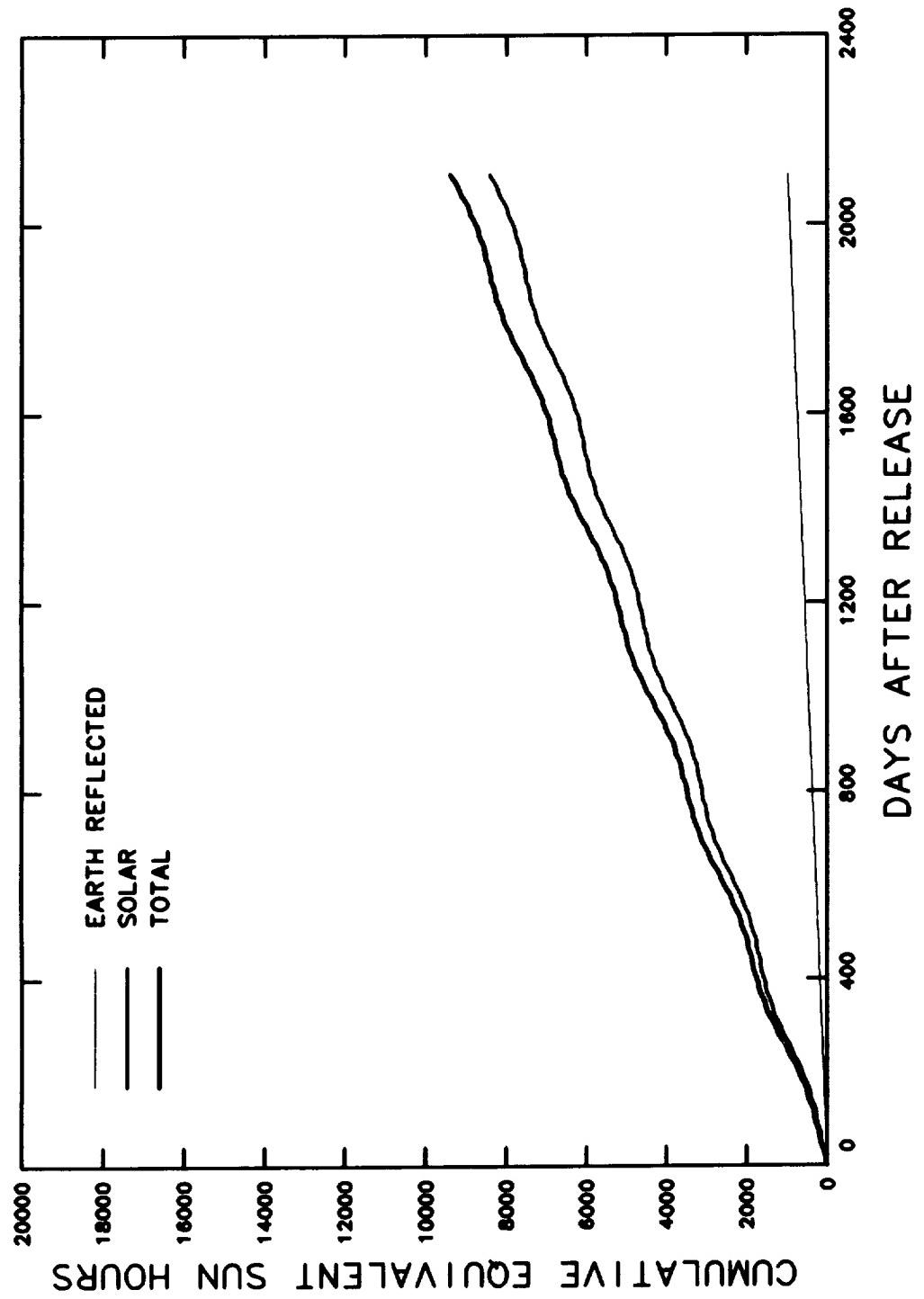


FIGURE 19. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF ROW 8 VS MISSION TIME.

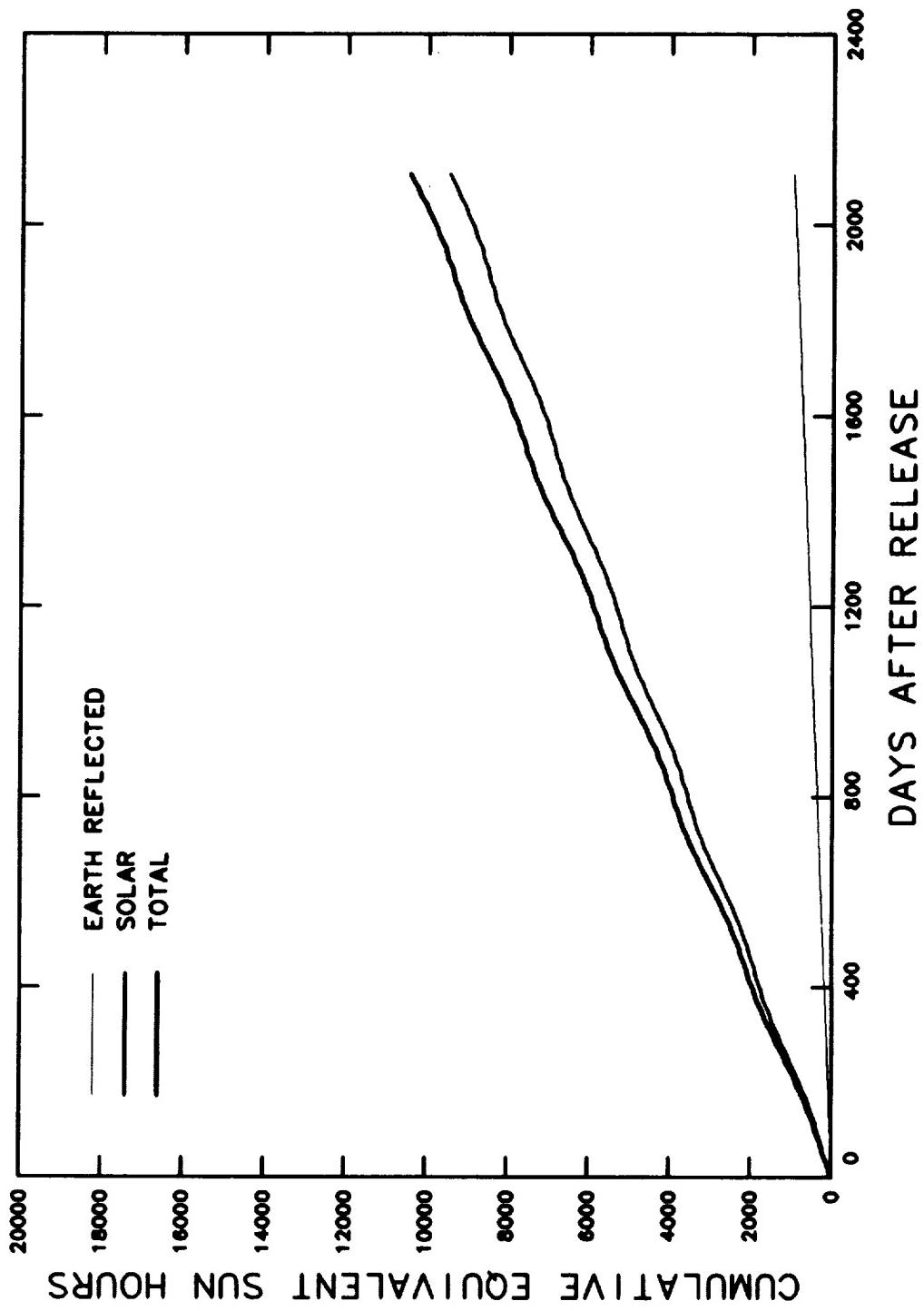


FIGURE 20. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF LONGERON 8-9 VS MISSION TIME.

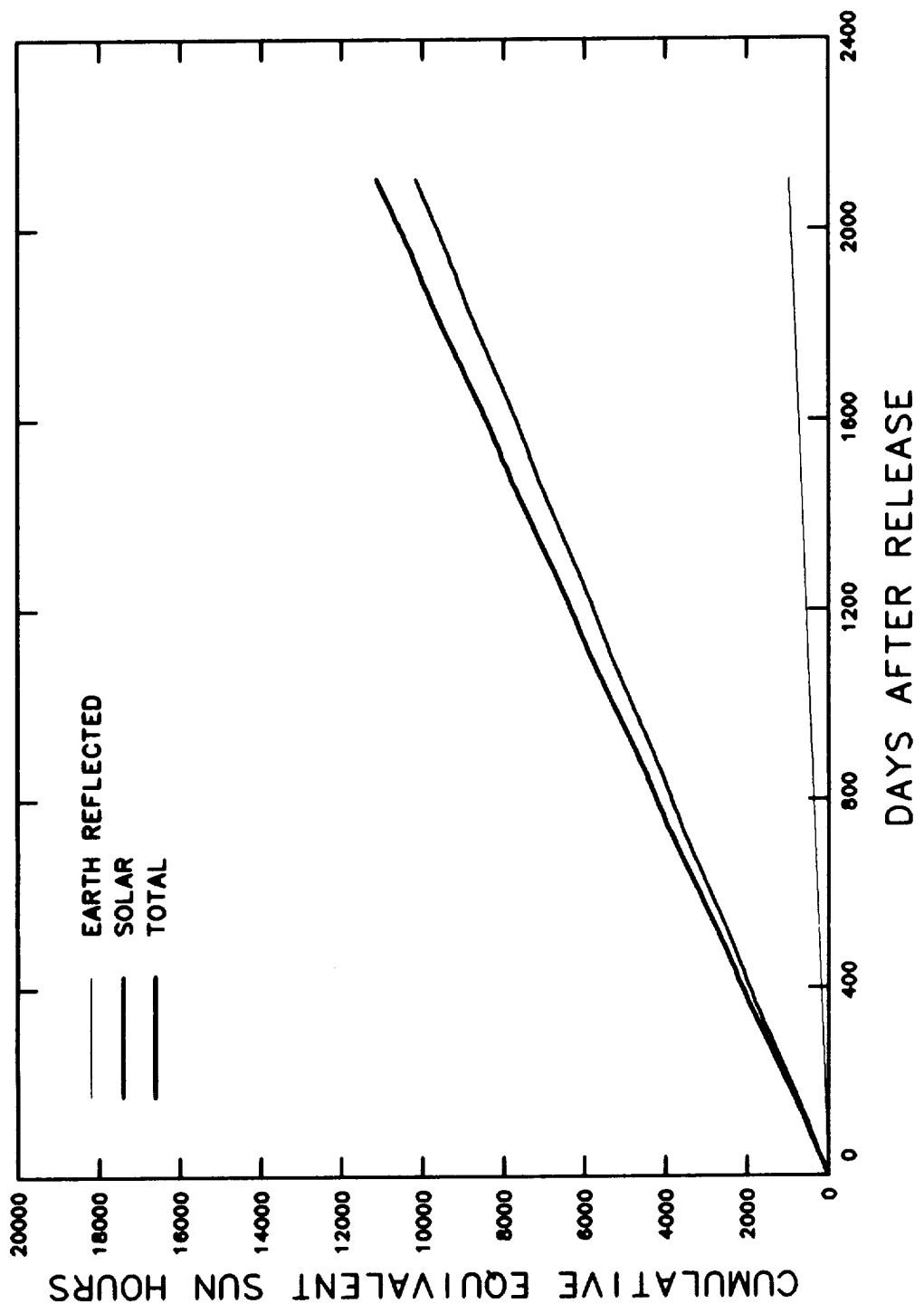


FIGURE 21. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF ROW 9 VS MISSION TIME.

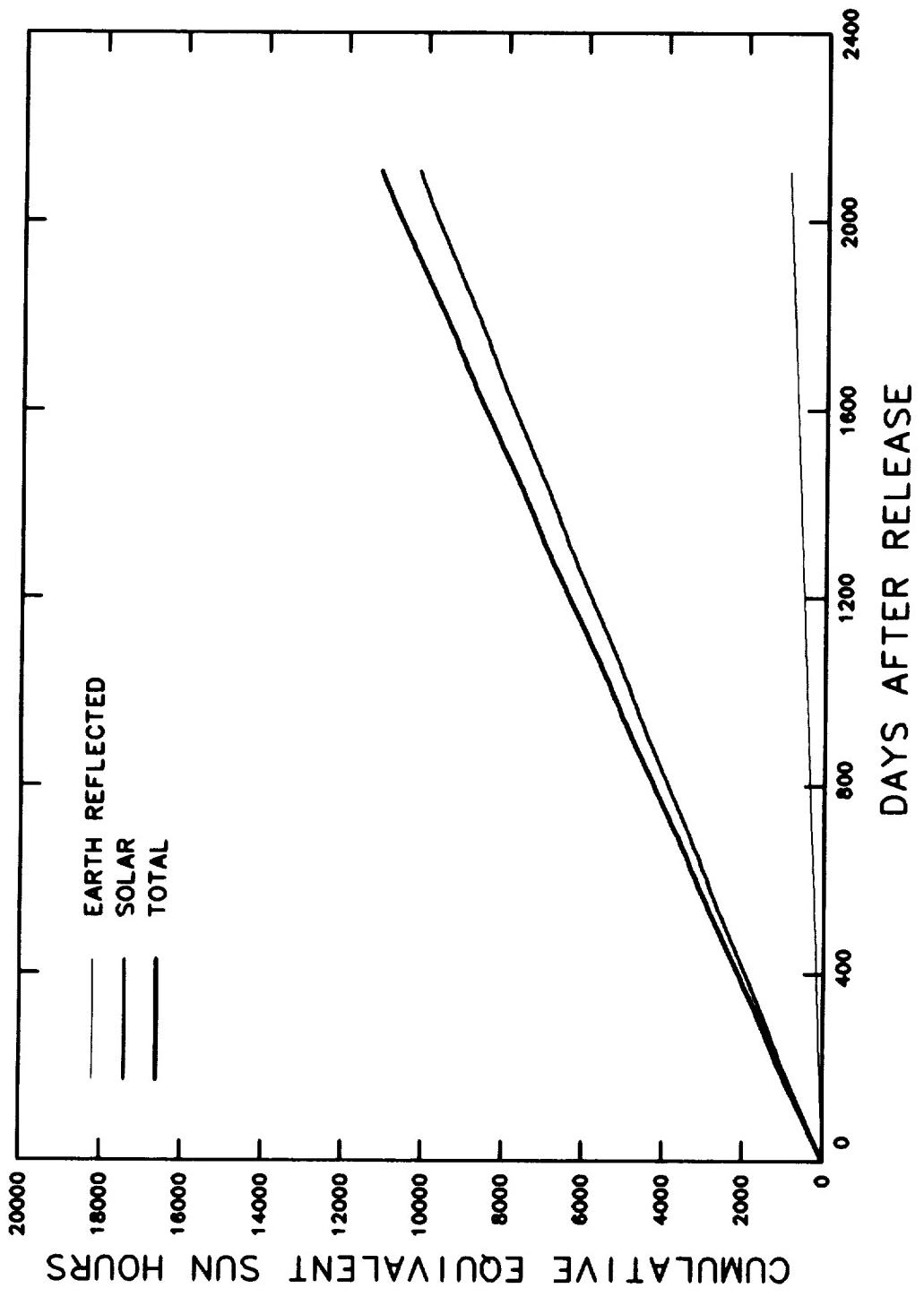


FIGURE 22. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF LONGERON 9-10 VS MISSION TIME.

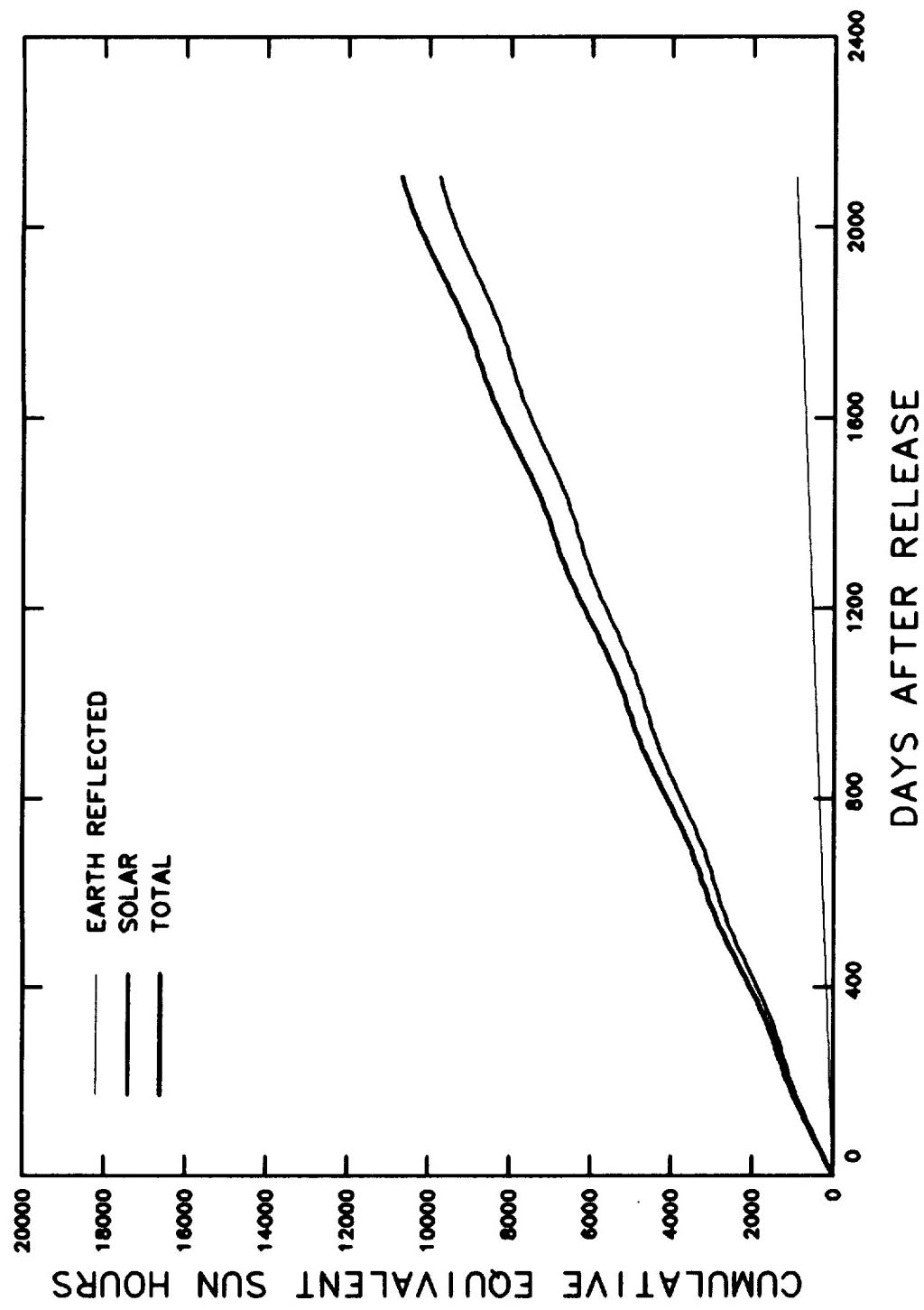


FIGURE 23. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF ROW 10 VS MISSION TIME.

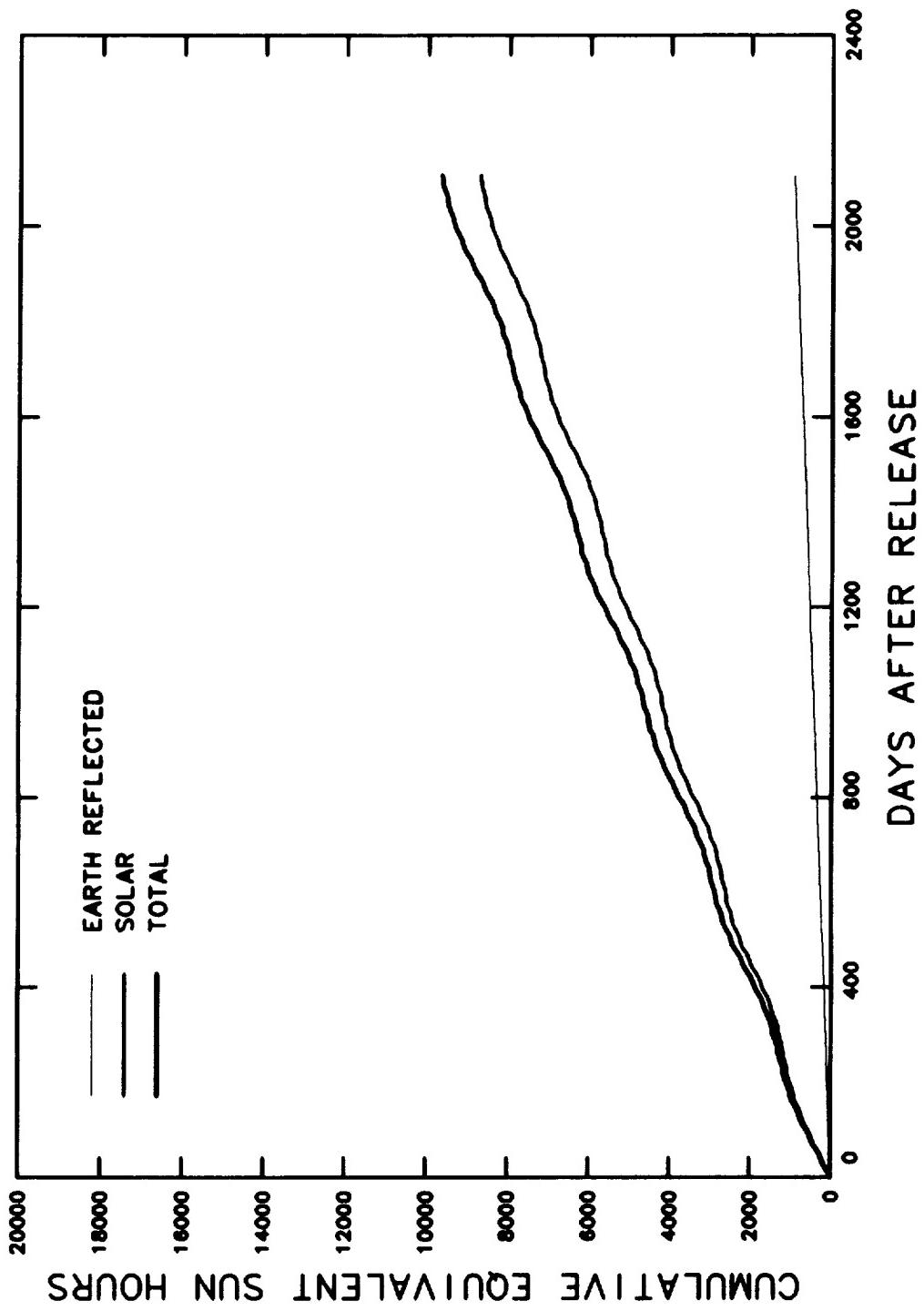


FIGURE 24. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF LONGERON 10-11 VS MISSION TIME.

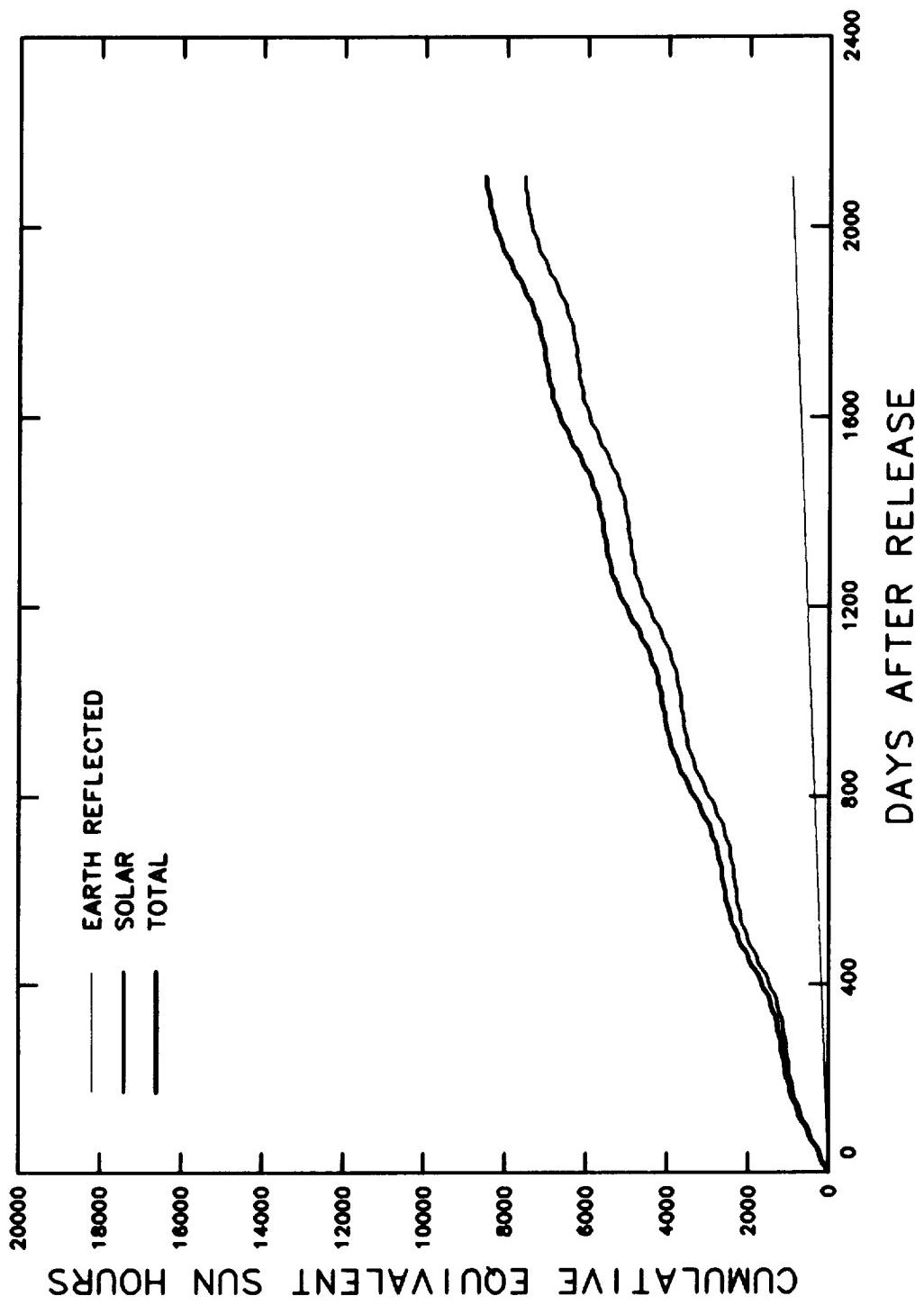


FIGURE 25. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF ROW 11 VS MISSION TIME.

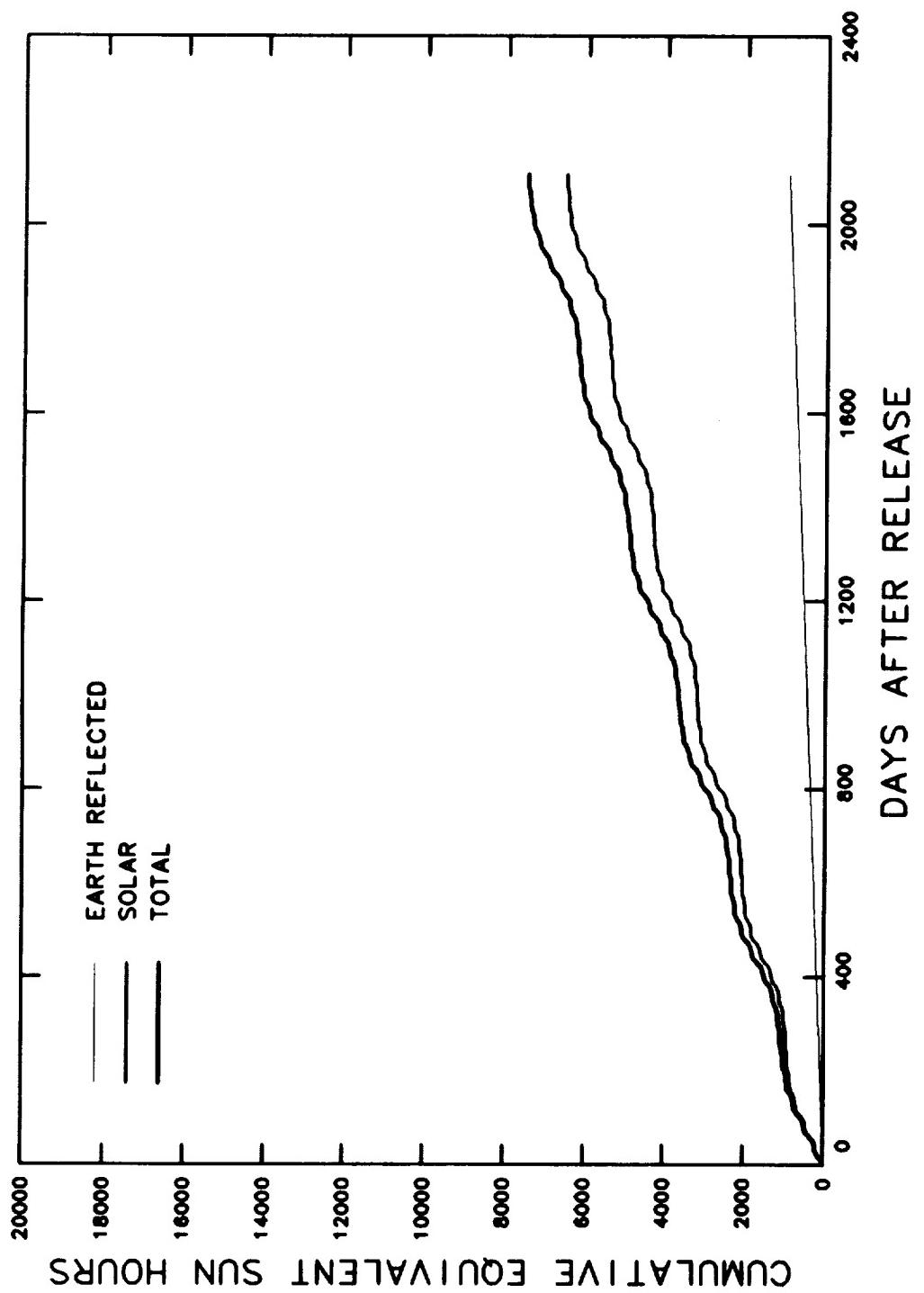


FIGURE 26. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF LONGERON 11-12 VS MISSION TIME.

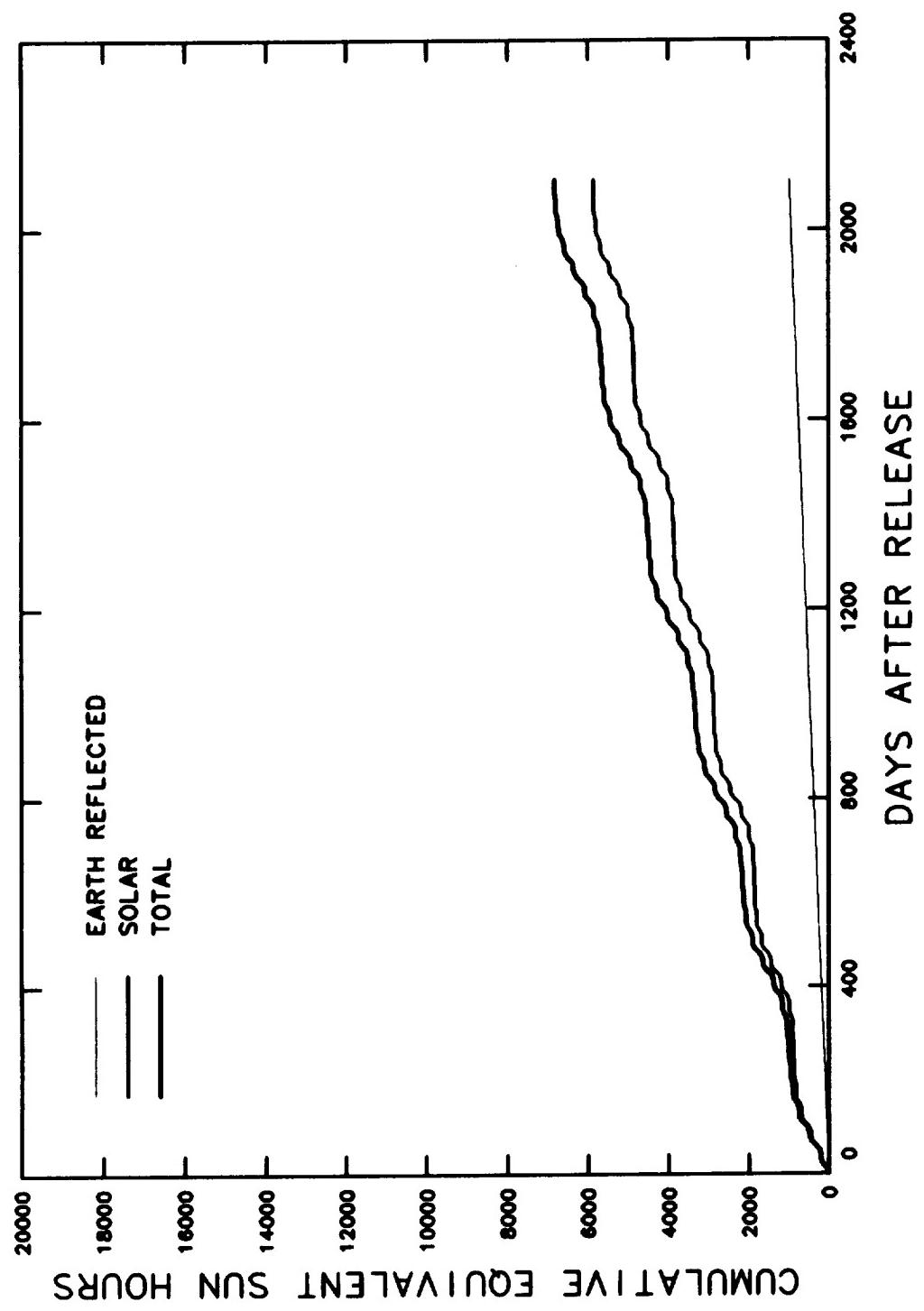


FIGURE 27. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF ROW 12 VS MISSION TIME.

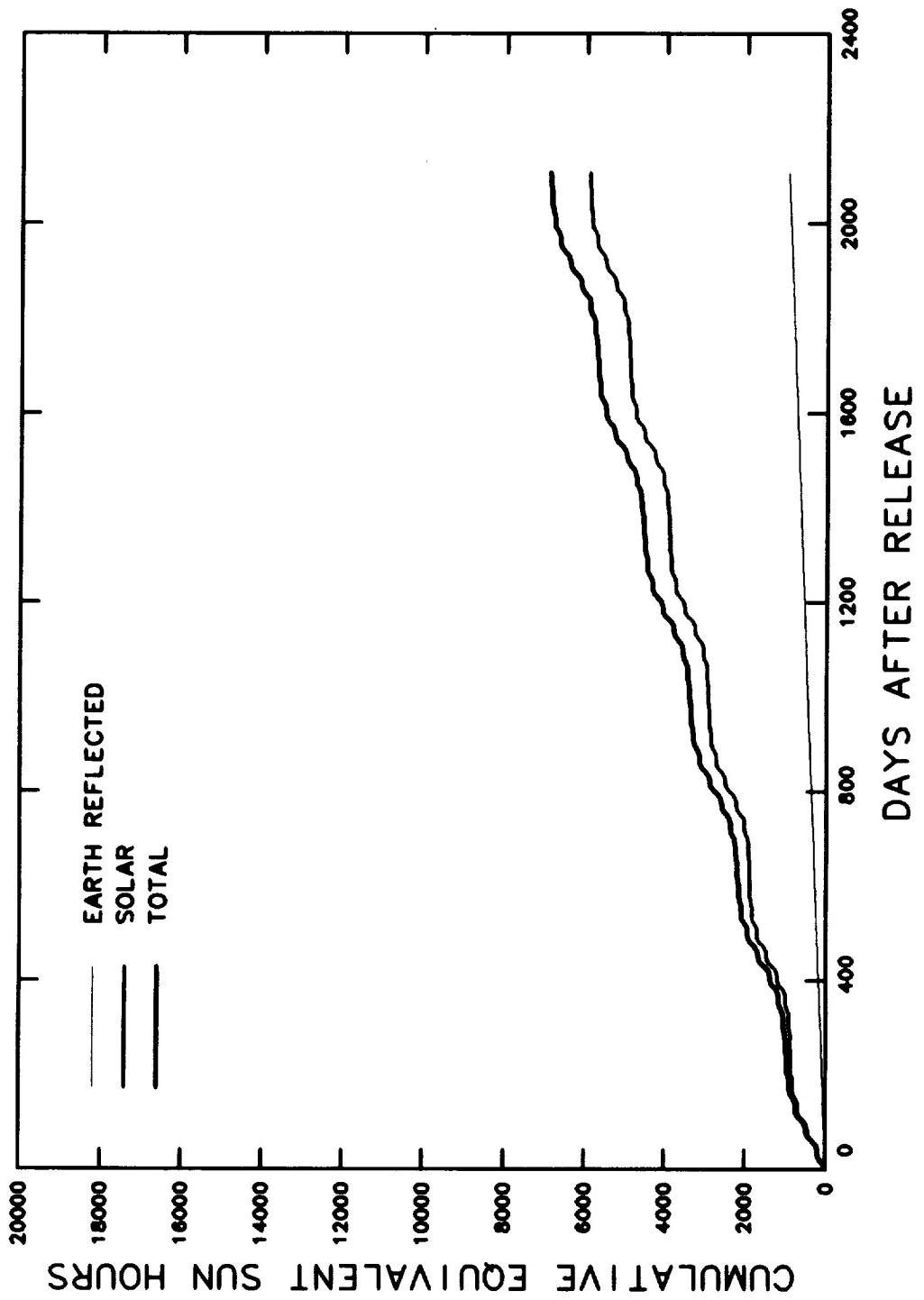


FIGURE 28 . CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF LONGERON 12-1 VS MISSION TIME .

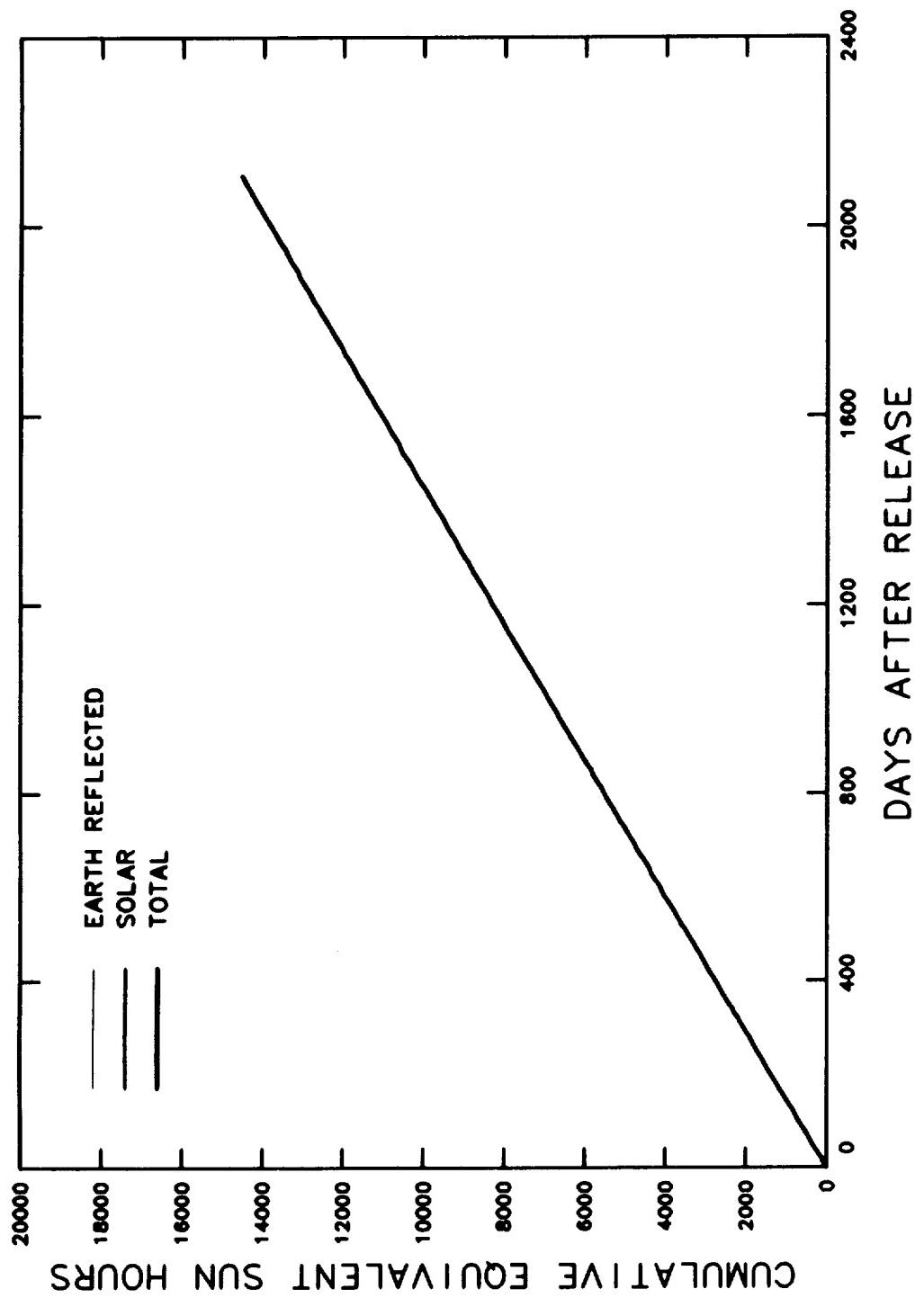


FIGURE 29. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF SPACE END VS MISSION TIME.

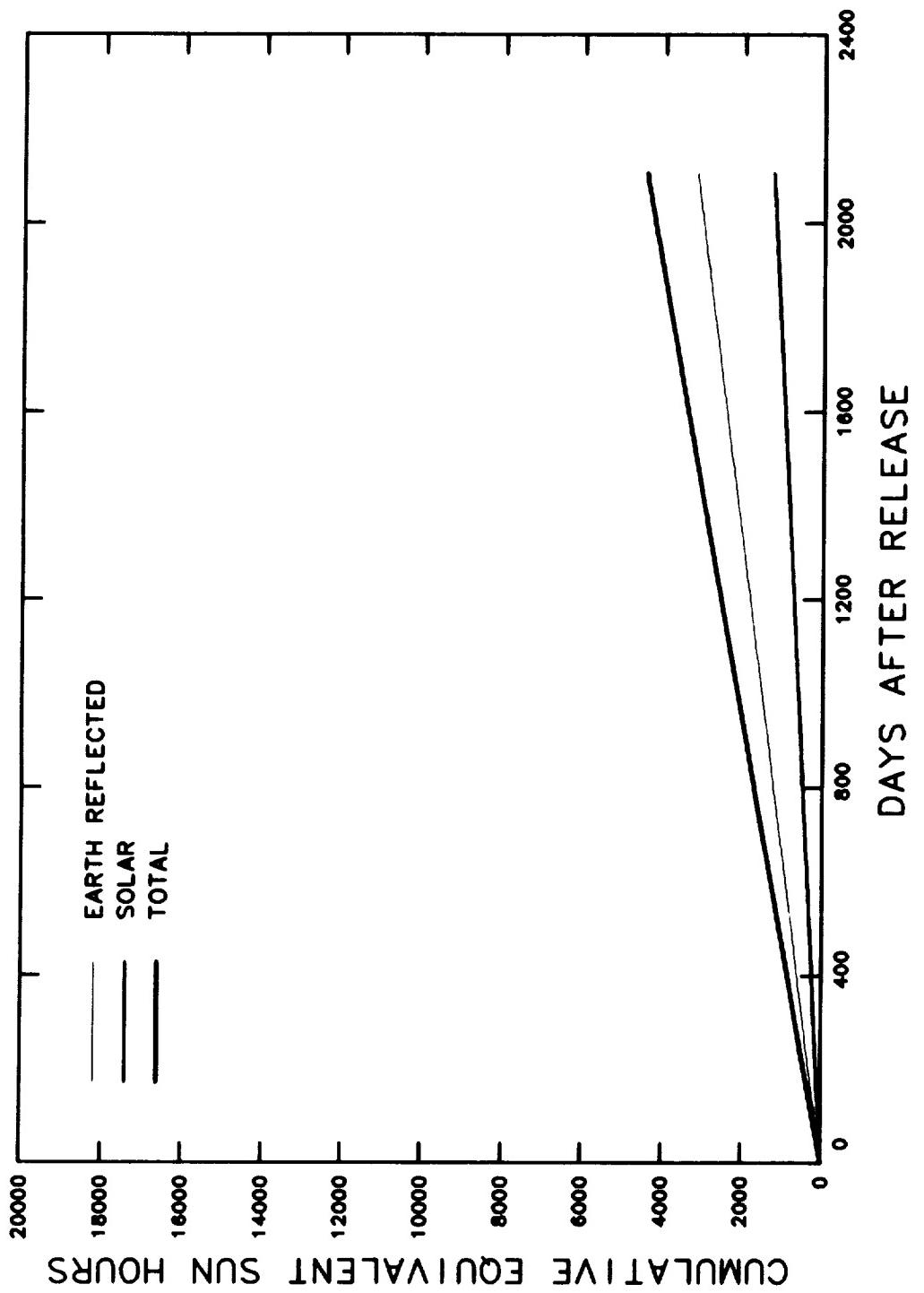


FIGURE 30. CUMULATIVE EQUIVALENT SUN HOURS FOR LDEF EARTH END VS MISSION TIME.

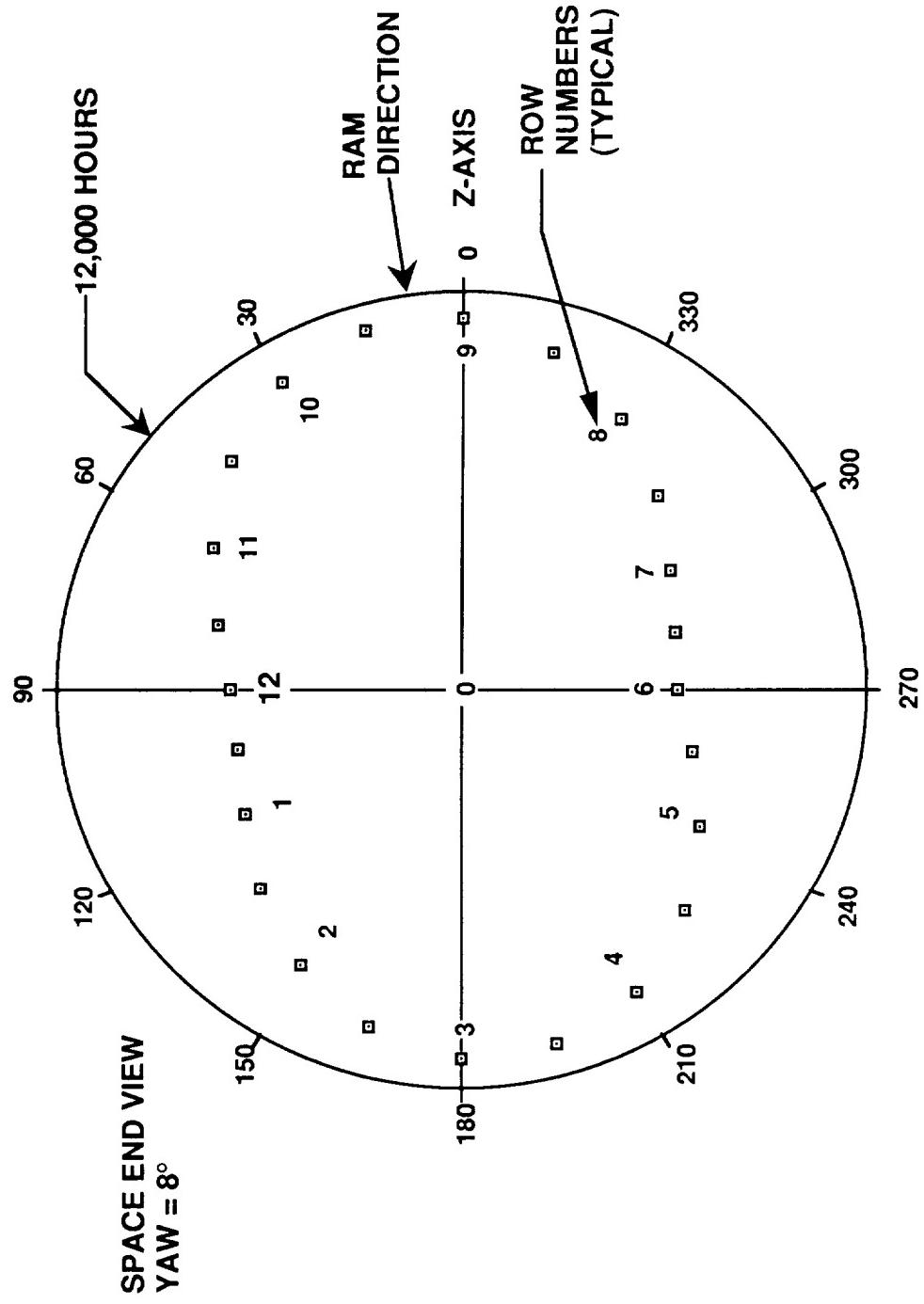


FIGURE 31. POLAR PLOT OF CUMULATIVE EQUIVALENT SUN HOURS AT END OF MISSION



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## **APPENDIX**

DATE 1991-09-17 TIME 14:53:23

CUMULATIVE EQUIVALENT SUN HOURS INCLUDES BOTH SOLAR AND EARTH REFLECTED EXPOSURE

AN EARTH ALBEDO OF .246 WILL BE USED TO SCALE EARTH REFLECTED EXPOSURE HOURS

UV BAND PARAMETERS

0.2 TO 0.4 MICROMETER BAND

UV BAND WAVELENGTHS	.20 TO .40 UM
SOLAR IRRADIANCE	.0109 W/CM**2

TO CONVERT FROM CUMULATIVE EQUIVALENT SUN HOURS (CESH) TO  
TOTAL SOLAR ENERGY FLUENCE (JOULE/CM\*\*2) MULTIPLY CESH BY 492.48

TO CONVERT FROM TOTAL SOLAR ENERGY FLUENCE TO

UV BAND ENERGY FLUENCE MULTIPLY TOTAL SOLAR ENERGY FLUENCE BY 7.9386E-02  
COMBINED SOLAR AND EARTH REFLECTED EXPOSURE HOURS WILL BE CALCULATED

SOLAR FORM FACTORS ARE FROM FILE \$USER.LDEF\_SOLAR.SOLPACK  
ALBEDO FORM FACTORS ARE FROM FILE \$USER.LDEF\_SOLAR.ALBPACK

DAILY BETA ANGLES FROM FILE \$USER.LDEF\_SOLAR.BAHIST\_M

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
0	1.41	2.62	3.88	5.43	5.74
1	3.20	5.58	8.05	9.78	10.96
2	5.40	8.93	12.52	14.95	16.57
3	8.08	12.67	17.31	20.33	22.25
4	11.26	16.84	22.40	25.89	27.99
5	15.01	21.45	27.80	31.63	33.76
6	19.35	26.50	33.50	37.52	39.54
7	24.34	32.02	39.48	43.54	45.32
8	30.09	38.05	45.72	49.67	51.07
9	36.67	44.62	52.19	55.88	56.78
10	44.06	51.70	58.88	62.15	62.43
11	52.18	59.25	65.77	68.48	68.03
12	60.92	67.20	72.82	74.85	73.56
13	70.20	75.50	80.04	81.25	79.02
14	79.90	84.08	87.38	87.89	84.43
15	89.88	92.86	94.82	94.14	89.81
16	100.01	101.73	102.31	100.61	95.16
17	110.15	110.61	109.81	107.08	100.51
18	120.14	119.39	117.25	113.53	105.89
19	129.84	127.98	124.60	119.97	111.30
20	139.15	136.30	131.82	126.37	116.76
21	147.94	144.28	138.89	132.74	122.28
22	156.15	151.88	145.80	139.08	127.87
23	163.69	159.06	152.53	145.36	133.51
24	170.48	165.76	159.06	151.59	139.21
25	176.50	171.97	165.38	157.75	144.95
26	181.80	177.70	171.47	163.82	150.72
27	186.48	183.00	177.32	169.78	156.50
28	190.63	187.91	182.93	175.62	162.28
29	194.45	192.58	188.37	181.38	168.05

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
0	2.799	3.02	3.62	4.53	5.37
1	4.948	5.44	6.75	8.66	10.46
2	6.521	7.32	9.40	12.40	15.25
3	7.599	8.70	11.58	15.73	19.73
4	8.282	9.64	13.30	18.66	23.89
5	8.700	10.24	14.62	21.20	27.70
6	9.054	10.62	15.57	23.35	31.17
7	9.432	10.88	16.23	25.15	34.30
8	9.835	11.10	16.72	26.68	37.07
9	10.235	11.32	17.18	27.99	39.50
10	10.631	11.59	17.63	29.13	41.61
11	11.022	11.88	18.07	30.08	43.42
12	11.405	12.17	18.48	30.88	44.97
13	11.779	12.47	18.87	31.56	46.31
14	12.146	12.77	19.24	32.14	47.49
15	12.506	13.08	19.60	32.65	48.56
16	12.862	13.38	19.95	33.13	49.58
17	13.219	13.68	20.31	33.62	50.60
18	13.579	13.98	20.66	34.13	51.67
19	13.946	14.29	21.03	34.71	52.84
20	14.319	14.59	21.42	35.37	54.17
21	14.701	14.88	21.83	36.16	55.70
22	15.091	15.17	22.27	37.10	57.47
23	15.487	15.44	22.72	38.20	59.52
24	15.888	15.68	23.18	39.47	61.87
25	16.288	15.90	23.65	40.92	64.53
26	16.687	16.12	24.21	42.59	67.50
27	17.048	16.43	24.99	44.54	70.78
28	17.410	16.87	26.04	46.82	74.37
29	17.813	17.44	27.31	49.30	78.14

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
0	2.81	1.42	.47	.68
1	5.96	3.13	1.21	1.68
2	9.50	5.24	2.34	3.09
3	13.43	7.82	3.98	5.02
4	17.79	10.95	6.25	7.53
5	22.57	14.72	9.28	10.74
6	27.80	19.26	13.29	14.76
7	33.47	24.59	18.32	19.67
8	39.57	30.69	24.36	25.51
9	46.08	37.49	31.33	32.29
10	53.00	44.96	39.16	39.98
11	60.30	53.05	47.78	48.49
12	67.96	61.68	57.09	57.70
13	75.95	70.80	66.98	67.50
14	84.21	80.29	77.32	77.78
15	92.67	90.06	87.99	88.38
16	101.24	99.97	98.81	99.14
17	109.81	109.88	109.64	109.91
18	118.28	119.65	120.30	120.51
19	126.55	129.16	130.66	130.80
20	134.55	138.30	140.58	140.64
21	142.24	146.98	149.96	149.90
22	149.59	155.14	158.68	158.51
23	156.59	162.73	166.65	166.36
24	163.20	169.71	173.84	173.38
25	169.44	176.05	180.20	179.54
26	175.30	181.72	185.68	184.84
27	180.77	186.69	190.24	189.34
28	186.85	190.97	193.93	193.09
29	190.70	194.84	197.09	196.40

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
30	197.81	196.88	193.56	187.01	173.80
31	200.75	200.85	198.51	192.49	179.51
32	203.33	204.52	203.24	197.83	185.18
33	205.58	207.90	207.75	203.04	190.80
34	207.57	211.05	212.07	208.12	196.37
35	209.33	214.00	216.22	213.09	201.89
36	210.93	216.79	220.25	217.98	207.37
37	212.40	219.47	224.18	222.79	212.82
38	213.81	222.08	228.04	227.56	218.26
39	215.19	224.66	231.89	232.32	223.68
40	216.59	227.27	235.76	237.10	229.11
41	218.07	229.95	239.69	241.91	234.57
42	219.67	232.74	243.71	246.79	240.05
43	221.44	235.70	247.87	251.77	245.58
44	223.43	238.86	252.20	256.86	251.15
45	225.71	242.26	256.72	262.07	256.77
46	228.32	245.95	261.47	267.43	262.44
47	231.31	249.96	266.45	272.93	268.16
48	234.75	254.33	271.69	278.58	273.91
49	238.68	259.08	277.19	284.37	279.69
50	243.17	264.25	282.95	290.29	285.47
51	248.31	269.87	288.99	296.34	291.24
52	254.23	276.01	295.27	302.48	296.99
53	261.03	282.71	301.81	308.71	302.68
54	268.73	289.99	308.58	315.01	308.31
55	277.28	297.82	315.58	321.36	313.86
56	286.63	306.16	322.82	327.77	319.32
57	296.74	315.03	330.30	334.24	324.68
58	307.56	324.39	338.05	340.77	329.93
59	319.00	334.20	346.04	347.36	335.10

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
30	18.396	18.26	52.10	82.19	117.11
31	19.249	19.40	50.84	55.22	86.50
32	20.422	20.87	33.11	58.63	91.04
33	21.935	22.69	35.71	62.32	95.80
34	23.790	24.84	38.60	66.26	100.75
35	25.986	27.29	41.75	70.42	105.85
36	28.424	30.00	45.12	74.75	111.08
37	31.101	32.90	48.65	79.20	116.40
38	33.919	35.94	52.28	83.74	121.77
39	36.786	39.02	55.95	88.31	127.16
40	39.605	42.05	59.58	92.84	132.54
41	42.282	44.96	63.11	97.30	137.85
42	44.736	47.67	66.48	101.63	143.08
43	46.903	50.11	69.62	105.78	148.18
44	48.742	52.24	72.50	109.71	153.12
45	50.234	54.04	75.08	113.38	157.86
46	51.375	55.48	77.32	116.77	162.39
47	52.189	56.57	79.21	119.84	166.66
48	52.733	57.35	80.74	122.59	170.66
49	53.117	57.87	81.94	125.00	174.37
50	53.471	58.21	82.80	127.06	177.76
51	53.859	58.45	83.41	128.80	180.81
52	54.261	58.67	83.89	130.28	183.51
53	54.660	58.91	84.34	131.54	185.85
54	55.055	59.18	84.80	132.61	187.84
55	55.441	59.48	85.22	133.46	189.47
56	55.814	59.78	85.61	134.11	190.78
57	56.171	60.08	85.96	134.60	191.81
58	56.509	60.38	86.28	134.95	192.60
59	56.829	60.67	86.58	135.20	193.23

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
30	195.19	198.16	199.58	199.12
31	199.34	201.03	201.54	201.35
32	203.20	203.50	203.06	203.16
33	206.78	205.66	204.25	204.63
34	210.12	207.56	205.16	205.83
35	213.26	209.27	205.88	206.81
36	216.24	210.83	206.48	207.64
37	219.10	212.29	206.99	208.37
38	221.90	213.70	207.46	209.04
39	224.67	215.09	207.91	209.69
40	227.47	216.49	208.38	210.36
41	230.34	217.96	208.89	211.08
42	233.32	219.52	209.48	211.92
43	236.46	221.23	210.21	212.90
44	239.81	223.14	211.14	214.11
45	243.41	225.31	212.34	215.60
46	247.29	227.83	213.90	217.45
47	251.49	230.74	215.92	219.74
48	256.04	234.16	218.52	222.56
49	260.97	238.17	221.87	226.02
50	266.31	242.90	226.12	230.25
51	272.06	248.39	231.36	235.34
52	278.25	254.63	237.60	241.38
53	284.87	261.62	244.80	248.41
54	291.95	269.35	252.97	258.45
55	299.49	277.81	262.05	265.43
56	307.52	286.99	272.03	275.32
57	316.98	296.88	282.83	286.07
58	326.17	307.45	294.40	297.59
59	334.79	318.65	306.63	309.79

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
60	330.94	344.39	354.26	354.02	340.18
61	343.33	354.94	362.70	360.75	345.20
62	355.87	365.59	371.22	367.49	350.19
63	368.37	376.21	379.71	374.23	355.19
64	380.64	386.66	388.10	380.94	360.22
65	392.52	396.81	396.29	387.59	365.32
66	403.89	406.57	404.25	394.18	370.49
67	414.63	415.87	411.97	400.70	375.76
68	424.67	424.69	419.42	407.16	381.13
69	433.96	432.99	426.64	413.56	386.59
70	442.45	440.78	433.63	419.91	392.15
71	450.12	448.04	440.39	426.21	397.78
72	456.91	454.74	446.92	432.44	403.48
73	462.85	460.90	453.22	438.59	409.22
74	468.04	466.55	459.27	444.64	414.99
75	472.61	471.77	465.07	450.58	420.77
76	476.64	476.60	470.62	456.39	426.55
77	480.21	481.07	475.93	462.08	432.32
78	483.37	485.21	481.01	467.64	438.05
79	486.17	489.06	485.88	473.07	443.74
80	488.67	492.66	490.55	478.38	449.40
81	490.92	496.04	495.05	483.58	455.02
82	492.98	499.26	499.42	488.70	460.60
83	494.89	502.34	503.69	493.75	466.15
84	496.71	505.35	507.89	498.75	471.69
85	498.50	508.32	512.07	503.74	477.22
86	500.30	511.30	516.25	508.73	482.75
87	502.17	514.34	520.49	513.75	488.30
88	504.16	517.49	524.80	518.84	493.87
89	506.36	520.78	529.24	524.00	499.47

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
60	57.130	60.95	86.87	135.38	193.73
61	57.414	61.22	87.13	135.51	194.14
62	57.692	61.48	87.40	135.63	194.53
63	57.972	61.75	87.66	135.75	194.92
64	58.261	62.02	87.93	135.89	195.35
65	58.565	62.30	88.22	136.06	195.87
66	58.887	62.59	88.52	136.34	196.51
67	59.227	62.89	88.85	136.70	197.33
68	59.586	63.20	89.20	137.21	198.38
69	59.960	63.50	89.59	137.88	199.72
70	60.347	63.79	90.01	138.74	201.37
71	60.742	64.07	90.47	139.81	203.37
72	61.141	64.30	90.92	141.08	205.72
73	61.543	64.52	91.40	142.55	208.41
74	61.934	64.76	91.99	144.27	211.44
75	62.291	65.08	92.83	146.29	214.78
76	62.662	65.56	93.95	148.63	218.43
77	63.145	66.26	95.39	151.28	222.35
78	63.847	67.22	97.16	154.24	226.52
79	64.814	68.48	99.21	157.46	230.92
80	66.065	70.04	101.65	160.94	235.52
81	67.588	71.86	104.16	164.64	240.28
82	69.348	73.92	106.97	168.52	245.18
83	71.297	76.16	109.94	172.52	250.17
84	73.381	78.52	113.02	176.62	255.23
85	75.521	80.94	116.14	180.75	260.32
86	77.641	83.34	119.25	184.87	265.40
87	79.664	85.64	122.27	188.92	270.43
88	81.623	87.80	125.17	192.87	275.38
89	83.162	89.74	127.88	196.65	280.21

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
60	344.87	330.37	319.41	322.54
61	355.39	342.57	332.66	335.77
62	366.06	354.92	346.07	349.16
63	376.69	367.23	359.43	362.50
64	387.09	379.30	372.56	375.61
65	397.12	390.96	385.27	388.29
66	406.67	402.08	397.43	400.42
67	415.70	412.58	408.91	411.85
68	424.20	422.40	419.63	422.51
69	432.19	431.52	429.53	432.33
70	439.70	439.93	438.56	441.25
71	446.77	447.63	446.69	449.25
72	453.39	454.61	453.88	456.28
73	459.58	460.88	460.15	462.34
74	465.37	466.43	465.47	467.50
75	470.76	471.25	469.84	471.83
76	475.77	475.39	473.35	475.44
77	480.42	478.96	476.14	478.42
78	484.75	482.06	478.36	480.90
79	488.79	484.77	480.15	482.96
80	492.58	487.17	481.59	484.69
81	496.15	489.32	482.76	486.16
82	499.55	491.29	483.74	487.42
83	502.83	493.12	484.69	488.55
84	506.03	494.88	485.37	489.59
85	509.19	496.60	486.11	490.59
86	512.36	498.34	486.86	491.61
87	515.59	500.13	487.67	492.68
88	518.93	502.02	488.58	493.88
89	522.42	504.08	489.68	495.24

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
90	508.67	524.27	533.83	529.25	505.10
91	511.32	527.99	538.59	534.62	510.78
92	514.39	532.07	543.62	540.15	516.50
93	517.85	536.46	548.88	545.80	522.26
94	521.77	541.19	554.37	551.59	528.03
95	526.19	546.30	560.10	557.50	533.82
96	531.19	551.83	566.08	563.52	539.59
97	536.88	557.82	572.30	569.64	545.35
98	543.38	564.33	578.75	575.84	551.06
99	550.72	571.39	585.43	582.11	556.72
100	558.86	578.95	592.32	588.44	562.31
101	567.76	587.00	599.42	594.82	567.82
102	577.36	595.52	606.74	601.25	573.25
103	587.61	604.48	614.27	607.72	578.59
104	598.43	613.84	622.01	614.25	583.84
105	609.71	623.53	629.94	620.83	589.03
106	621.31	633.46	638.00	627.45	594.17
107	633.08	643.52	646.15	634.08	599.28
108	644.86	653.59	654.29	640.72	604.39
109	656.47	663.53	662.36	647.34	609.53
110	667.74	673.22	670.29	653.91	614.72
111	678.56	682.57	678.02	660.44	619.98
112	688.78	691.52	685.55	666.92	625.32
113	698.34	700.00	692.85	673.34	630.75
114	707.15	708.00	699.92	679.71	636.27
115	716.16	715.48	706.78	686.03	641.87
116	722.31	722.41	713.41	692.29	647.55
117	728.57	728.76	719.79	698.47	653.27
118	733.98	734.56	725.92	704.55	659.04
119	738.65	739.87	731.77	710.52	664.82

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
90	84.549	91.43	130.35	200.24	284.89
91	85.654	92.83	132.56	203.60	289.39
92	86.414	93.87	134.38	206.62	293.62
93	86.943	94.62	135.90	209.34	297.60
94	87.336	95.15	137.10	211.76	301.32
95	87.684	95.51	138.01	213.87	304.74
96	88.062	95.77	138.66	215.67	307.86
97	88.464	95.98	139.16	217.21	310.66
98	88.865	96.21	139.62	218.54	313.13
99	89.262	96.47	140.07	219.69	315.26
100	89.652	96.76	140.51	220.64	317.05
101	90.033	97.06	140.91	221.40	318.54
102	90.401	97.36	141.29	222.00	319.75
103	90.755	97.66	141.64	222.46	320.73
104	91.094	97.96	141.96	222.81	321.53
105	91.418	98.25	142.27	223.09	322.20
106	91.732	98.54	142.56	223.31	322.78
107	92.040	98.82	142.85	223.52	323.32
108	92.347	99.11	143.14	223.72	323.86
109	92.661	99.40	143.44	223.94	324.44
110	92.986	99.69	143.74	224.22	325.10
111	93.325	99.99	144.07	224.57	325.90
112	93.679	100.29	144.42	225.03	326.89
113	94.048	100.59	144.79	225.64	328.12
114	94.430	100.89	145.20	226.43	329.64
115	94.822	101.17	145.64	227.41	331.49
116	95.220	101.43	146.10	228.60	333.70
117	95.621	101.65	146.56	229.99	336.26
118	96.024	101.87	147.10	231.62	339.19
119	96.386	102.17	147.87	233.58	342.47

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
90	526.09	506.35	490.96	496.83
91	530.00	508.90	492.56	498.72
92	534.27	511.91	494.68	501.10
93	538.84	515.35	497.32	503.95
94	543.76	519.34	500.63	507.39
95	549.04	523.97	504.77	511.52
96	554.71	529.31	509.81	516.43
97	560.78	535.36	515.79	522.21
98	567.25	542.10	522.67	528.91
99	574.15	549.53	530.44	536.54
100	581.46	557.63	539.09	545.07
101	589.21	566.40	548.56	554.45
102	597.41	575.82	558.81	564.63
103	606.07	585.84	569.77	575.52
104	615.16	596.41	581.33	587.04
105	624.64	607.44	593.39	599.07
106	634.40	618.80	605.80	611.44
107	644.32	630.34	618.39	624.01
108	654.25	641.89	630.99	636.58
109	664.01	653.26	643.41	648.96
110	673.49	664.29	655.47	660.98
111	682.58	674.85	667.02	672.50
112	691.21	684.85	677.95	683.36
113	699.38	694.22	688.15	693.48
114	707.08	702.91	697.53	702.77
115	714.33	710.91	708.03	711.16
116	721.12	718.18	713.61	718.58
117	727.47	724.71	720.22	725.00
118	733.39	730.49	725.83	730.42
119	738.86	735.46	730.40	734.92

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
120	742.73	744.73	737.35	716.34	670.60
121	746.26	749.17	742.63	722.02	676.36
122	749.29	753.21	747.64	727.53	682.08
123	752.06	757.03	752.48	732.95	687.77
124	754.41	760.50	757.06	738.20	693.40
125	756.40	763.65	761.38	743.28	698.97
126	758.07	766.52	765.46	748.21	704.48
127	759.49	769.14	769.34	752.99	709.91
128	760.69	771.55	773.04	757.64	715.28
129	761.75	773.80	776.59	762.18	720.80
130	762.69	775.94	780.03	766.65	725.87
131	763.58	778.01	783.42	771.06	731.12
132	764.44	780.06	786.77	775.46	736.36
133	765.32	782.12	790.15	779.87	741.61
134	766.26	784.26	793.59	784.34	746.88
135	767.30	786.50	797.14	788.87	752.20
136	768.50	788.90	800.82	793.52	757.56
137	769.89	791.50	804.68	798.28	762.99
138	771.52	794.32	808.73	803.18	768.48
139	773.44	797.41	813.01	808.24	774.04
140	775.70	800.81	817.52	813.44	779.66
141	778.34	804.52	822.28	818.81	785.33
142	781.40	808.58	827.39	824.33	791.06
143	784.90	813.00	832.57	830.00	796.81
144	788.90	817.80	838.10	835.81	802.59
145	793.40	822.98	843.88	841.73	808.38
146	798.47	828.55	849.88	847.77	814.15
147	804.15	834.53	856.10	853.88	819.90
148	810.48	840.94	862.50	860.07	825.63
149	817.43	847.74	869.08	866.31	831.32

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
120	96.753	102.64	148.97	235.89	346.09
121	97.253	103.35	150.44	238.57	350.04
122	98.041	104.42	152.30	241.62	354.29
123	99.035	105.71	154.39	244.87	358.71
124	100.442	107.42	156.89	248.48	363.40
125	102.296	109.57	159.78	252.42	368.35
126	104.622	112.15	163.04	256.67	373.52
127	107.419	115.17	166.66	261.20	378.88
128	110.675	118.58	170.58	265.96	384.41
129	114.341	122.34	174.76	270.91	390.06
130	118.317	126.36	179.12	276.00	395.80
131	122.486	130.54	183.60	281.17	401.60
132	126.722	134.78	188.13	286.38	407.42
133	130.896	138.97	192.61	291.56	413.22
134	134.885	143.00	196.98	296.66	418.96
135	138.573	146.78	201.17	301.62	424.62
136	141.887	150.22	205.11	306.39	430.16
137	144.714	153.28	208.77	310.95	435.54
138	147.108	155.93	212.09	315.24	440.75
139	149.048	158.16	215.05	319.24	445.74
140	150.559	159.98	217.64	322.93	450.49
141	151.673	161.39	219.85	326.29	455.00
142	152.443	162.44	221.69	329.32	459.24
143	152.953	163.17	223.18	332.02	463.19
144	153.330	163.68	224.33	334.38	466.86
145	153.685	164.00	225.19	336.44	470.24
146	154.067	164.25	225.82	338.21	473.33
147	154.470	164.47	228.32	339.76	476.13
148	154.871	164.89	228.78	341.13	478.66
149	155.269	164.93	227.24	342.36	480.95

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
120	743.90	739.66	733.98	738.59
121	748.52	743.18	736.71	741.52
122	752.75	746.14	738.78	743.85
123	756.76	748.82	740.53	745.88
124	760.43	751.07	741.81	747.45
125	763.76	752.97	742.72	748.65
126	766.82	754.59	743.37	749.54
127	769.63	756.01	743.85	750.22
128	772.23	757.29	744.24	750.75
129	774.67	758.49	744.60	751.19
130	776.99	759.63	744.95	751.57
131	779.24	760.75	745.30	751.92
132	781.47	761.85	745.66	752.27
133	783.72	762.96	746.01	752.62
134	786.04	764.11	746.36	753.00
135	788.47	765.30	746.72	753.43
136	791.06	766.57	747.11	753.95
137	793.84	767.97	747.57	754.61
138	796.85	769.56	748.19	755.47
139	800.14	771.40	749.05	756.61
140	803.72	773.56	750.23	758.08
141	807.62	776.10	751.83	759.96
142	811.87	779.09	753.92	762.32
143	816.48	782.58	756.62	765.23
144	821.45	786.67	760.06	768.77
145	826.80	791.42	764.34	773.02
146	832.51	796.83	769.48	778.02
147	838.57	802.86	775.44	783.78
148	844.97	809.46	782.14	790.29
149	851.66	816.58	789.50	797.49

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
150	824.93	854.89	875.80	872.60	836.96
151	832.87	862.32	882.63	878.91	842.57
152	841.12	869.95	889.56	885.25	848.15
153	849.57	877.72	896.53	891.60	853.71
154	858.07	885.51	903.52	897.95	859.27
155	866.43	893.21	910.47	904.29	864.84
156	874.51	900.73	917.35	910.62	870.44
157	882.21	908.01	924.12	916.91	876.07
158	889.37	914.95	930.75	923.17	881.74
159	895.91	921.49	937.21	929.38	887.45
160	901.77	927.59	943.48	935.52	893.20
161	906.94	933.23	949.53	941.57	898.97
162	911.49	938.44	955.32	947.50	904.75
163	915.46	943.22	960.84	953.30	910.53
164	918.88	947.57	966.07	958.94	916.28
165	921.76	951.49	970.98	964.41	921.99
166	924.15	954.99	975.58	969.67	927.63
167	926.07	958.08	979.85	974.72	933.18
168	927.56	960.77	983.79	979.54	938.64
169	928.68	963.10	987.41	984.14	943.98
170	929.50	965.09	990.71	988.49	949.20
171	930.09	966.79	993.71	992.61	954.28
172	930.57	968.28	998.42	996.50	959.22
173	931.03	969.61	998.87	1000.17	964.04
174	931.48	970.81	1001.10	1003.65	968.73
175	931.94	971.91	1003.14	1006.97	973.32
176	932.39	972.93	1005.06	1010.18	977.83
177	932.83	973.89	1006.87	1013.30	982.29
178	933.26	974.84	1008.66	1016.40	986.73
179	933.70	975.79	1010.45	1019.51	991.17

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
150	155.666	165.21	227.69	343.47	483.01
151	156.058	165.49	228.14	344.47	484.90
152	156.447	165.78	228.57	345.40	486.65
153	156.834	166.07	228.99	346.27	488.32
154	157.220	166.36	229.42	347.13	489.97
155	157.608	166.65	229.84	348.03	491.68
156	158.000	166.93	230.28	348.99	493.51
157	158.394	167.21	230.74	350.06	495.49
158	158.792	167.47	231.19	351.24	497.69
159	159.192	167.70	231.65	352.56	500.14
160	159.594	167.91	232.13	354.06	502.87
161	159.985	168.15	232.73	355.79	505.90
162	160.341	168.48	233.57	357.81	509.26
163	160.720	168.98	234.73	360.20	512.94
164	161.274	169.77	236.28	362.96	516.95
165	162.172	170.96	238.27	366.12	521.30
166	163.546	172.63	240.74	369.70	525.97
167	165.494	174.87	243.70	373.70	530.97
168	168.134	177.75	247.21	378.14	536.27
169	171.609	181.34	251.26	383.00	541.86
170	176.012	185.72	255.89	388.29	547.73
171	181.328	190.90	261.12	393.99	553.83
172	187.459	196.86	266.99	400.12	560.15
173	194.303	203.54	273.51	406.67	566.65
174	201.758	210.87	280.59	413.58	573.30
175	209.704	218.70	288.14	420.79	580.08
176	218.012	226.91	296.02	428.22	586.95
177	226.544	235.36	304.11	435.77	593.87
178	235.156	243.88	312.27	443.37	600.81
179	243.764	252.40	320.42	450.97	607.76

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
150	858.64	824.13	797.45	805.30
151	865.84	832.06	805.86	813.60
152	873.22	840.26	814.63	822.26
153	880.71	848.64	823.62	831.14
154	888.22	857.06	832.66	840.07
155	895.66	865.35	841.54	848.85
156	902.94	873.41	850.12	857.31
157	910.02	881.13	858.28	865.34
158	916.82	888.42	865.87	872.78
159	923.32	895.19	872.80	879.52
160	929.47	901.38	878.96	885.48
161	935.25	906.92	884.26	890.62
162	940.62	911.72	888.61	894.94
163	945.58	915.78	892.01	898.46
164	950.12	919.17	894.59	901.25
165	954.23	921.97	896.47	903.41
166	957.92	924.26	897.79	905.01
167	961.19	926.09	898.64	906.14
168	964.08	927.57	899.16	906.89
169	966.59	928.81	899.54	907.36
170	968.76	929.89	899.89	907.68
171	970.62	930.86	900.28	907.92
172	972.18	931.70	900.68	908.14
173	973.49	932.42	901.08	908.36
174	974.60	933.04	901.48	908.61
175	975.54	933.58	901.88	908.89
176	976.37	934.07	902.27	909.17
177	977.13	934.52	902.66	909.45
178	977.87	934.96	903.05	909.74
179	978.60	935.40	903.44	910.03

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
180	934.14	976.78	1012.29	1022.65	995.64
181	934.60	977.82	1014.24	1025.89	1000.17
182	935.05	978.95	1016.33	1029.26	1004.79
183	935.50	980.18	1018.62	1032.79	1009.51
184	935.97	981.54	1021.12	1036.50	1014.35
185	936.46	983.06	1023.88	1040.43	1019.32
186	937.07	984.79	1026.91	1044.58	1024.42
187	937.89	986.79	1030.22	1048.94	1029.64
188	938.99	989.09	1033.82	1053.52	1034.97
189	940.41	991.71	1037.70	1058.30	1040.41
190	942.18	994.67	1041.86	1063.28	1045.93
191	944.33	997.96	1046.30	1068.43	1051.53
192	946.86	1001.58	1050.99	1073.76	1067.19
193	949.77	1005.53	1055.92	1079.23	1062.90
194	953.05	1009.77	1061.07	1084.83	1068.64
195	956.69	1014.30	1066.42	1090.53	1074.41
196	960.66	1019.07	1071.94	1096.33	1080.19
197	964.90	1024.05	1077.59	1102.20	1085.97
198	969.37	1029.20	1083.34	1108.12	1091.75
199	973.99	1034.46	1089.17	1114.07	1097.53
200	978.70	1039.78	1095.03	1120.04	1103.32
201	983.41	1045.10	1100.89	1126.01	1109.10
202	988.03	1050.36	1106.71	1131.96	1114.88
203	992.48	1055.50	1112.47	1137.87	1120.68
204	996.70	1060.46	1118.11	1143.74	1126.45
205	1000.64	1065.22	1123.61	1149.53	1132.22
206	1004.23	1069.71	1128.93	1155.22	1137.99
207	1007.45	1073.90	1134.05	1160.80	1143.72
208	1010.27	1077.77	1138.92	1166.23	1149.42
209	1012.68	1081.29	1143.53	1171.51	1155.06

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
180	252.239	260.78	328.46	614.66	774.56
181	260.446	268.89	336.25	465.85	621.51
182	268.256	276.58	343.67	472.98	628.25
183	275.563	283.74	350.60	479.79	634.87
184	282.241	290.26	356.97	486.25	641.33
185	288.236	296.08	362.73	492.31	647.61
186	293.455	301.18	367.89	497.96	653.69
187	297.832	305.53	372.50	503.24	659.54
188	301.372	309.19	376.60	508.13	665.16
189	304.157	312.19	380.21	512.65	670.52
190	306.323	314.63	383.35	516.79	675.62
191	307.970	316.58	386.96	520.59	680.45
192	309.191	318.10	388.38	524.04	685.03
193	310.668	319.27	390.35	527.18	689.36
194	310.692	320.14	392.00	530.04	693.45
195	311.146	320.80	393.39	532.64	697.33
196	311.526	321.30	394.56	535.03	701.01
197	311.883	321.71	395.56	537.24	704.54
198	312.238	322.06	396.44	539.32	707.94
199	312.596	322.38	397.25	541.31	711.26
200	312.957	322.68	398.01	543.26	714.53
201	313.319	322.98	398.78	545.20	717.80
202	313.677	323.30	399.59	547.19	721.12
203	314.031	323.65	400.47	549.28	724.52
204	314.389	324.07	401.49	551.50	728.08
205	314.773	324.59	402.68	553.91	731.77
206	315.246	325.27	404.10	556.54	735.67
207	315.909	326.19	405.80	559.45	739.81
208	316.860	327.43	407.85	562.66	744.19
209	318.208	329.08	410.29	566.22	748.85

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
180	979.38	935.86	903.84	910.31
181	980.24	936.36	904.23	910.59
182	981.23	936.93	904.63	910.86
183	982.39	937.57	905.03	911.10
184	983.76	938.32	905.43	911.32
185	985.37	939.19	905.83	911.54
186	987.25	940.17	906.22	911.78
187	989.43	941.25	906.57	912.10
188	991.92	942.47	906.94	912.57
189	994.73	943.89	907.42	913.25
190	997.88	945.60	908.14	914.24
191	1001.36	947.65	909.21	915.60
192	1005.17	950.08	910.68	917.36
193	1009.30	952.91	912.60	919.55
194	1013.74	956.15	915.00	922.18
195	1018.44	959.80	917.89	925.26
196	1023.40	963.85	921.28	928.76
197	1028.55	968.26	925.12	932.65
198	1033.87	972.95	929.33	936.84
199	1039.30	977.84	933.80	941.25
200	1044.78	982.83	938.39	945.78
201	1050.26	987.83	942.99	950.30
202	1055.68	992.71	947.44	954.70
203	1060.99	997.39	951.64	958.89
204	1066.14	1001.78	955.45	962.75
205	1071.07	1005.79	958.79	966.21
206	1075.74	1009.38	961.61	969.23
207	1080.12	1012.55	963.92	971.78
208	1084.18	1015.28	965.73	973.87
209	1087.89	1017.59	967.07	975.50

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
210	1014.67	1084.44	1147.86	1176.59	1160.63
211	1016.26	1087.22	1151.88	1181.47	1166.11
212	1017.46	1089.63	1155.57	1186.12	1171.48
213	1018.32	1091.68	1158.92	1190.51	1176.72
214	1018.91	1093.38	1161.93	1194.64	1181.80
215	1019.39	1094.83	1164.57	1198.47	1186.72
216	1019.84	1096.03	1166.81	1201.96	1191.42
217	1020.29	1097.04	1168.70	1205.15	1195.92
218	1020.70	1097.85	1170.26	1208.05	1200.21
219	1021.08	1098.49	1171.53	1210.67	1204.30
220	1021.44	1098.98	1172.56	1213.05	1208.20
221	1021.77	1099.36	1173.39	1215.23	1211.93
222	1022.08	1099.66	1174.09	1217.25	1215.52
223	1022.38	1099.90	1174.71	1219.18	1219.02
224	1022.68	1100.13	1175.28	1221.05	1222.46
225	1022.97	1100.36	1175.86	1222.93	1225.91
226	1023.27	1100.61	1176.49	1224.86	1229.41
227	1023.59	1100.91	1177.20	1226.90	1233.02
228	1023.92	1101.30	1178.05	1229.10	1236.76
229	1024.28	1101.80	1179.09	1231.49	1240.68
230	1024.66	1102.44	1180.37	1234.13	1244.78
231	1025.07	1103.25	1181.93	1237.02	1249.07
232	1025.52	1104.25	1183.80	1240.19	1253.56
233	1025.97	1105.43	1186.00	1243.65	1258.24
234	1026.43	1106.81	1188.53	1247.39	1263.09
235	1026.96	1108.40	1191.39	1251.40	1268.11
236	1027.67	1110.27	1194.57	1255.66	1273.27
237	1028.65	1112.44	1198.05	1260.15	1278.56
238	1029.93	1114.93	1201.82	1264.85	1283.95
239	1031.53	1117.72	1205.84	1269.73	1289.44

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
210	320.053	331.22	413.17	570.15	753.79
211	322.527	333.95	416.55	574.49	759.03
212	325.797	337.37	420.48	579.26	764.56
213	330.046	341.62	425.01	584.47	770.38
214	335.349	346.79	430.23	590.17	776.48
215	341.669	352.94	436.27	596.41	782.84
216	349.079	360.21	443.31	603.30	789.49
217	357.426	368.46	451.23	610.74	796.36
218	366.653	377.61	459.95	618.70	803.46
219	376.698	387.60	469.41	627.15	810.78
220	387.470	398.34	479.53	636.06	818.32
221	398.870	409.71	490.24	645.36	826.07
222	410.767	421.58	501.40	655.00	834.00
223	423.008	433.81	512.88	664.87	842.07
224	435.418	446.21	524.52	674.86	850.20
225	447.818	458.60	536.16	684.85	858.33
226	460.026	470.79	547.61	694.69	866.38
227	471.872	482.62	558.72	704.30	874.29
228	483.218	493.93	569.38	713.57	882.02
229	493.945	504.62	579.46	722.44	889.54
230	503.958	514.58	588.89	730.87	896.86
231	513.190	523.73	597.62	738.84	903.96
232	521.589	532.04	605.58	746.31	910.85
233	529.114	539.43	612.73	753.27	917.52
234	535.736	545.89	619.04	759.89	923.96
235	541.451	551.43	624.56	765.59	930.17
236	546.224	556.14	629.43	771.04	936.13
237	550.100	560.07	633.73	776.08	941.85
238	563.177	563.33	637.54	780.76	947.31
239	555.635	566.04	640.91	785.09	952.54

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
210	1091.23	1019.50	967.99	976.70
211	1094.20	1021.05	968.58	977.52
212	1096.80	1022.33	968.97	978.05
213	1099.02	1023.43	969.32	978.39
214	1100.88	1024.40	969.71	978.63
215	1102.38	1025.21	970.11	978.84
216	1103.50	1025.84	970.51	979.09
217	1104.32	1026.32	970.90	979.37
218	1104.87	1026.67	971.29	979.67
219	1105.23	1026.92	971.66	979.97
220	1105.45	1027.11	972.02	980.27
221	1105.60	1027.26	972.36	980.57
222	1105.72	1027.39	972.69	980.87
223	1105.83	1027.52	973.01	981.16
224	1105.94	1027.65	973.32	981.45
225	1106.06	1027.77	973.64	981.74
226	1106.17	1027.90	973.96	982.03
227	1106.29	1028.03	974.29	982.32
228	1106.44	1028.19	974.63	982.62
229	1106.67	1028.38	974.99	982.93
230	1107.04	1028.63	975.36	983.23
231	1107.59	1028.99	975.75	983.52
232	1108.39	1029.46	976.14	983.81
233	1109.47	1030.07	976.54	984.06
234	1110.86	1030.83	976.94	984.28
235	1112.58	1031.74	977.34	984.50
236	1114.62	1032.77	977.71	984.78
237	1116.98	1033.93	978.06	985.18
238	1119.65	1035.26	978.47	985.76
239	1122.63	1036.82	979.06	986.59

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
240	1033.43	1120.80	1210.10	1274.78	1294.99
241	1035.64	1124.14	1214.58	1279.96	1300.60
242	1038.11	1127.72	1219.23	1285.26	1306.25
243	1040.82	1131.49	1224.03	1290.65	1311.94
244	1043.71	1135.42	1228.96	1296.11	1317.64
245	1046.74	1139.46	1233.96	1301.63	1323.36
246	1049.85	1143.57	1239.01	1307.17	1329.09
247	1052.96	1147.68	1244.07	1312.71	1334.82
248	1056.02	1151.73	1249.08	1318.23	1340.54
249	1058.94	1155.69	1254.03	1323.71	1346.25
250	1061.70	1159.50	1258.86	1329.12	1351.94
251	1064.22	1163.12	1263.55	1334.44	1357.60
252	1066.48	1166.52	1268.06	1339.65	1363.22
253	1068.45	1169.65	1272.37	1344.72	1368.78
254	1070.10	1172.50	1276.44	1349.64	1374.28
255	1071.44	1175.04	1280.25	1354.37	1379.69
256	1072.47	1177.26	1283.78	1358.89	1385.00
257	1073.21	1179.17	1287.00	1363.19	1390.18
258	1073.75	1180.78	1289.89	1367.22	1395.21
259	1074.21	1182.17	1292.44	1370.98	1400.08
260	1074.68	1183.36	1294.64	1374.44	1404.76
261	1075.11	1184.35	1296.50	1377.60	1409.23
262	1075.52	1185.13	1298.02	1380.45	1413.50
263	1075.89	1185.73	1299.23	1383.02	1417.55
264	1076.24	1186.18	1300.18	1385.32	1421.39
265	1076.55	1186.50	1300.92	1387.39	1425.02
266	1076.85	1186.73	1301.50	1389.27	1428.46
267	1077.13	1186.89	1301.97	1391.00	1431.76
268	1077.39	1187.02	1302.38	1392.64	1434.96
269	1077.66	1187.14	1302.76	1394.24	1438.11

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
240	557.600	568.29	643.89	789.10	957.54
241	559.177	570.17	646.54	792.84	962.34
242	560.456	571.76	648.92	796.35	966.95
243	561.507	573.11	651.07	799.65	971.42
244	562.398	574.28	653.05	802.81	975.75
245	563.186	575.35	654.91	805.86	980.01
246	563.916	576.35	656.69	808.84	984.21
247	564.646	577.35	658.48	811.82	988.41
248	565.419	578.39	660.32	814.85	992.65
249	566.281	579.54	662.27	817.98	996.96
250	567.291	580.84	664.38	821.25	1001.39
251	568.514	582.37	666.70	824.71	1005.97
252	570.022	584.18	669.29	828.39	1010.73
253	571.902	586.35	672.20	832.35	1015.69
254	574.258	588.97	675.49	836.62	1020.87
255	577.214	592.13	679.22	841.23	1026.30
256	580.960	595.95	683.44	846.22	1031.97
257	585.612	600.55	688.23	851.61	1037.90
258	591.235	606.01	693.68	857.47	1044.09
259	597.802	612.41	699.94	863.85	1050.51
260	605.315	619.79	707.08	870.80	1057.18
261	613.758	628.14	715.08	878.30	1064.08
262	623.100	637.41	723.90	886.33	1071.21
263	633.308	647.56	733.51	894.88	1078.58
264	644.328	658.55	743.87	903.94	1086.20
265	656.086	670.29	754.90	913.48	1094.08
266	668.484	682.67	766.53	923.47	1102.21
267	681.388	695.57	778.63	933.81	1110.55
268	694.641	708.82	791.06	944.40	1119.06
269	708.052	722.23	803.84	955.12	1127.64

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END	
240	1125.90	1038.64	979.91	987.70	511.04
241	1129.43	1040.75	981.03	989.12	513.25
242	1133.20	1043.12	982.45	990.82	515.45
243	1137.16	1045.73	984.12	992.78	517.66
244	1141.28	1048.54	986.01	994.95	519.86
245	1145.50	1051.50	988.08	997.27	522.06
246	1149.80	1054.55	990.25	999.70	524.26
247	1154.10	1057.60	992.42	1002.13	526.47
248	1158.34	1060.58	994.52	1004.48	528.67
249	1162.49	1063.43	996.46	1006.70	530.87
250	1166.49	1066.09	998.18	1008.70	533.08
251	1170.30	1068.52	999.65	1010.46	535.28
252	1173.88	1070.68	1000.84	1011.94	537.49
253	1177.20	1072.56	1001.74	1013.12	539.69
254	1180.24	1074.17	1002.37	1014.00	541.89
255	1182.97	1075.53	1002.80	1014.62	544.08
256	1185.38	1076.71	1003.16	1015.04	546.26
257	1187.46	1077.76	1003.52	1015.33	548.42
258	1189.21	1078.69	1003.93	1015.55	550.56
259	1190.62	1079.46	1004.33	1015.77	552.68
260	1191.70	1080.07	1004.73	1016.02	554.77
261	1192.49	1080.53	1005.12	1016.31	556.83
262	1193.02	1080.87	1005.50	1016.60	558.86
263	1193.34	1081.11	1005.87	1016.91	560.87
264	1193.53	1081.28	1006.22	1017.21	562.86
265	1193.85	1081.41	1006.56	1017.51	564.83
266	1193.76	1081.54	1006.87	1017.79	566.79
267	1193.91	1081.68	1007.17	1018.07	568.76
268	1194.09	1081.83	1007.45	1018.34	570.72
269	1194.29	1082.00	1007.73	1018.60	572.68

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
270	1077.92	1187.26	1303.15	1395.84	1441.28
271	1078.19	1187.40	1303.58	1397.52	1444.51
272	1078.47	1187.59	1304.69	1399.36	1447.87
273	1078.78	1187.85	1304.73	1401.26	1451.39
274	1079.11	1188.22	1305.55	1403.42	1455.11
275	1079.46	1188.73	1306.61	1405.84	1459.04
276	1079.86	1189.42	1307.96	1408.54	1463.19
277	1080.29	1190.37	1309.77	1411.65	1467.64
278	1080.75	1191.54	1311.93	1415.08	1472.29
279	1081.21	1192.91	1314.46	1418.81	1477.14
280	1081.74	1194.52	1317.34	1422.84	1482.17
281	1082.49	1196.43	1320.56	1427.13	1487.35
282	1083.53	1198.67	1324.11	1431.67	1492.67
283	1084.92	1201.27	1327.96	1436.43	1498.09
284	1086.66	1204.19	1332.10	1441.40	1503.61
285	1088.76	1207.44	1336.50	1446.53	1509.20
286	1091.20	1210.99	1341.13	1451.81	1514.85
287	1093.95	1214.80	1345.97	1457.23	1520.54
288	1096.99	1218.85	1350.98	1462.74	1526.26
289	1100.27	1223.09	1356.12	1468.34	1532.00
290	1103.73	1227.48	1361.38	1474.00	1537.76
291	1107.32	1231.97	1366.70	1479.69	1543.52
292	1110.98	1236.50	1372.66	1485.40	1549.29
293	1114.62	1241.03	1377.40	1491.11	1555.05
294	1118.18	1245.49	1382.70	1498.80	1560.81
295	1121.60	1249.84	1387.93	1502.44	1566.56
296	1124.81	1254.04	1393.04	1508.02	1572.30
297	1127.78	1258.03	1398.01	1513.51	1578.02
298	1130.47	1261.78	1402.80	1518.89	1583.70
299	1132.84	1265.27	1407.39	1524.15	1589.33

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
270	721.422	735.60	816.18	965.80	1136.21
271	734.553	748.73	828.49	976.31	1144.66
272	747.264	761.44	840.41	986.51	1152.92
273	759.406	773.56	851.80	996.31	1160.94
274	770.854	784.98	862.55	1005.65	1168.71
275	781.519	795.60	872.58	1014.49	1176.21
276	791.330	805.36	881.83	1022.80	1183.47
277	799.904	813.84	889.95	1030.37	1190.40
278	807.524	821.33	897.19	1037.39	1197.10
279	814.166	827.81	903.52	1043.82	1203.55
280	819.827	833.30	909.00	1049.69	1209.74
281	824.469	837.89	913.78	1055.08	1215.67
282	828.147	841.66	917.96	1060.03	1221.32
283	830.998	844.72	921.62	1064.59	1226.71
284	833.214	847.21	924.80	1068.77	1231.83
285	834.923	849.22	927.57	1072.61	1236.70
286	836.238	850.84	929.98	1076.14	1241.34
287	837.244	852.14	932.08	1079.41	1245.77
288	838.026	853.20	933.93	1082.45	1250.01
289	838.654	854.08	935.59	1085.31	1254.11
290	839.184	854.83	937.10	1088.04	1258.10
291	839.658	855.51	938.53	1090.68	1262.00
292	840.109	856.16	939.91	1093.27	1265.88
293	840.563	856.82	941.30	1095.88	1269.76
294	841.050	857.52	942.75	1098.54	1273.68
295	841.603	858.31	944.30	1101.30	1277.70
296	842.266	859.23	946.01	1104.21	1281.83
297	843.097	860.34	947.92	1107.30	1286.12
298	844.166	861.71	950.08	1110.62	1290.59
299	845.552	863.40	952.56	1114.21	1295.27

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
270	1194.49	1082.16	1008.01	1018.87
271	1194.66	1082.31	1008.30	1019.14
272	1194.79	1082.44	1008.60	1019.42
273	1194.90	1082.57	1008.92	1019.72
274	1195.04	1082.72	1009.26	1020.02
275	1195.28	1082.91	1009.62	1020.32
276	1195.69	1083.19	1010.00	1020.62
277	1196.44	1083.64	1010.39	1020.90
278	1197.49	1084.23	1010.79	1021.16
279	1198.87	1084.99	1011.19	1021.38
280	1200.60	1085.91	1011.59	1021.60
281	1202.69	1086.96	1011.95	1021.90
282	1205.12	1088.15	1012.31	1022.33
283	1207.90	1089.55	1012.77	1022.99
284	1211.02	1091.23	1013.48	1023.95
285	1214.46	1093.23	1014.49	1025.25
286	1218.19	1095.57	1015.87	1026.92
287	1222.20	1098.24	1017.60	1028.93
288	1226.43	1101.20	1019.68	1031.27
289	1230.86	1104.44	1022.06	1033.90
290	1235.43	1107.88	1024.70	1036.75
291	1240.10	1111.47	1027.52	1039.76
292	1244.82	1115.13	1030.42	1042.85
293	1249.52	1118.78	1033.30	1045.92
294	1254.17	1122.33	1036.08	1048.89
295	1258.71	1125.72	1038.65	1051.69
296	1263.09	1128.89	1040.96	1054.24
297	1267.27	1131.78	1042.95	1056.50
298	1271.21	1134.37	1044.60	1058.44
299	1274.89	1136.64	1045.91	1060.03

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
300	1134.88	1268.47	1411.75	1529.26	1465.89
301	1136.58	1271.36	1415.85	1534.19	1562.70
302	1137.95	1273.93	1419.69	1538.94	1568.42
303	1138.99	1276.17	1423.23	1543.48	1605.84
304	1139.76	1278.11	1426.48	1547.80	1611.16
305	1140.31	1279.76	1429.42	1551.87	1616.35
306	1140.79	1281.20	1432.05	1555.69	1621.40
307	1141.24	1282.43	1434.34	1559.23	1621.40
308	1141.70	1283.51	1436.34	1562.51	1621.40
309	1142.13	1284.42	1438.07	1565.56	1621.40
310	1142.54	1285.19	1439.57	1568.40	1621.40
311	1142.92	1285.85	1440.88	1571.06	1624.40
312	1143.29	1286.43	1442.05	1573.58	1625.39
313	1143.65	1286.95	1443.13	1576.01	1626.34
314	1144.01	1287.45	1444.17	1578.41	1626.40
315	1144.37	1287.96	1445.23	1580.82	1626.45
316	1144.73	1288.51	1446.35	1583.30	1626.50
317	1145.11	1289.13	1447.59	1585.90	1627.23
318	1145.51	1289.85	1449.01	1588.66	1627.43
319	1145.93	1290.71	1450.66	1591.63	1628.18
320	1146.38	1291.74	1452.57	1594.84	1628.50
321	1146.84	1292.93	1454.79	1598.32	1629.98
322	1147.30	1294.32	1457.34	1602.07	1630.07
323	1147.83	1295.93	1460.23	1606.11	1630.85
324	1148.59	1297.86	1463.47	1610.41	1635.02
325	1149.68	1300.15	1467.05	1614.98	1637.76
326	1151.15	1302.82	1470.98	1619.80	1640.50
327	1153.05	1305.90	1475.24	1624.84	1642.20
328	1155.42	1309.38	1479.82	1630.09	1643.04
329	1158.26	1313.26	1484.71	1635.53	1642.42

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
300	847.336	865.48	955.39	1118.10	1300.18
301	849.619	868.03	958.63	1122.33	1305.34
302	852.517	871.13	962.32	1126.91	1310.74
303	856.197	874.90	966.50	1131.86	1316.40
304	860.760	879.42	971.23	1137.22	1322.30
305	866.248	884.75	976.57	1143.00	1328.45
306	872.603	890.94	982.64	1149.27	1334.83
307	879.883	898.07	989.56	1156.07	1341.44
308	887.947	906.03	997.22	1163.35	1348.24
309	896.719	914.72	1005.53	1171.05	1355.23
310	906.121	924.05	1014.40	1179.11	1362.37
311	916.048	933.92	1023.76	1187.49	1369.66
312	926.385	944.21	1033.48	1196.12	1377.07
313	936.990	954.77	1043.46	1204.92	1384.55
314	947.709	965.45	1053.54	1213.79	1392.08
315	958.387	976.08	1063.57	1222.63	1399.59
316	968.859	986.51	1073.43	1231.35	1407.03
317	978.973	996.57	1082.95	1239.84	1414.37
318	988.593	1006.13	1092.02	1248.03	1421.58
319	997.597	1015.05	1100.54	1255.86	1428.62
320	1005.880	1023.24	1108.40	1263.27	1435.48
321	1013.347	1030.57	1115.49	1270.19	1442.14
322	1019.925	1036.98	1121.77	1276.58	1448.57
323	1025.555	1042.44	1127.22	1282.44	1454.76
324	1030.149	1046.99	1131.97	1287.81	1460.67
325	1033.724	1050.67	1136.08	1292.72	1466.30
326	1036.407	1053.58	1139.62	1297.18	1471.62
327	1038.378	1055.84	1142.61	1301.20	1478.62
328	1039.774	1057.54	1145.09	1304.80	1481.31
329	1040.709	1058.77	1147.12	1307.99	1485.68

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
300	1278.28	1138.59	1046.87	1061.28
301	1281.35	1140.24	1047.54	1062.26
302	1284.11	1141.62	1047.99	1062.84
303	1286.55	1142.81	1048.35	1063.27
304	1288.66	1143.87	1048.71	1063.57
305	1290.45	1144.82	1049.11	1063.80
306	1291.94	1145.62	1049.51	1064.02
307	1293.10	1146.27	1049.91	1064.26
308	1294.01	1146.80	1050.30	1064.54
309	1294.70	1147.21	1050.69	1064.83
310	1295.21	1147.54	1051.07	1065.12
311	1295.59	1147.81	1051.45	1065.42
312	1295.88	1148.03	1051.81	1065.73
313	1296.13	1148.24	1052.17	1066.03
314	1296.36	1148.43	1052.53	1066.33
315	1296.60	1148.62	1052.89	1066.64
316	1296.87	1148.83	1053.26	1066.94
317	1297.22	1149.08	1053.63	1067.24
318	1297.67	1149.38	1054.01	1067.54
319	1298.29	1149.77	1054.39	1067.83
320	1299.13	1150.26	1054.79	1068.11
321	1300.23	1150.88	1055.18	1068.36
322	1301.63	1151.64	1055.59	1068.58
323	1303.38	1152.57	1055.99	1068.81
324	1305.48	1153.63	1056.35	1069.10
325	1307.95	1154.84	1056.71	1069.56
326	1310.82	1156.30	1057.22	1070.29
327	1314.08	1158.12	1058.06	1071.40
328	1317.75	1160.39	1059.36	1072.98
329	1321.82	1163.14	1061.19	1075.09

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
330	1161.58	1317.54	1489.88	1641.15	1728.48
331	1165.40	1322.21	1495.32	1646.91	1734.33
332	1169.71	1327.23	1501.00	1652.79	1750.04
333	1174.48	1332.60	1506.89	1658.77	1755.82
334	1179.71	1338.28	1512.96	1664.83	1761.59
335	1185.37	1344.25	1519.17	1670.94	1767.34
336	1191.26	1350.37	1525.45	1677.09	1773.09
337	1197.46	1356.69	1531.82	1683.26	1778.82
338	1203.86	1363.14	1538.24	1689.45	1784.54
339	1210.33	1369.64	1544.69	1695.65	1790.25
340	1216.77	1376.11	1551.12	1701.85	1795.97
341	1223.03	1382.47	1557.51	1708.03	1801.70
342	1229.01	1388.65	1563.81	1714.18	1807.44
343	1234.62	1394.59	1570.01	1720.29	1813.20
344	1239.81	1400.25	1576.06	1726.34	1818.97
345	1244.56	1405.60	1581.94	1732.32	1824.75
346	1248.87	1410.63	1587.62	1738.20	1830.53
347	1252.73	1415.33	1593.09	1743.97	1836.31
348	1256.14	1419.67	1598.31	1749.61	1842.06
349	1259.11	1423.66	1603.28	1755.11	1847.77
350	1261.66	1427.31	1607.98	1760.44	1853.43
351	1263.81	1430.60	1612.42	1765.60	1859.03
352	1265.59	1433.56	1616.59	1770.58	1864.56
353	1267.04	1436.21	1620.49	1775.37	1870.01
354	1268.20	1438.57	1624.14	1779.99	1875.36
355	1269.11	1440.68	1627.55	1784.43	1880.62
356	1269.84	1442.56	1630.75	1788.71	1885.79
357	1270.43	1444.27	1633.76	1792.83	1890.88
358	1270.95	1445.86	1636.61	1796.84	1895.89
359	1271.44	1447.37	1639.35	1800.74	1900.85

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
330	1041.310	1059.61	1148.74	1310.82	1489.75
331	1041.712	1060.18	1150.00	1313.30	1493.52
332	1042.068	1060.57	1150.97	1315.48	1497.02
333	1042.432	1060.86	1151.71	1317.39	1500.25
334	1042.827	1061.10	1152.29	1319.09	1503.26
335	1043.229	1061.31	1152.79	1320.64	1506.07
336	1043.631	1061.53	1153.28	1322.13	1508.79
337	1044.033	1061.74	1153.74	1323.53	1511.37
338	1044.433	1061.97	1154.20	1324.89	1513.87
339	1044.834	1062.19	1154.66	1326.23	1516.35
340	1045.234	1062.42	1155.12	1327.57	1518.84
341	1045.635	1062.64	1155.58	1328.96	1521.40
342	1046.037	1062.85	1156.06	1330.42	1524.07
343	1046.440	1063.07	1156.57	1331.99	1526.91
344	1046.831	1063.31	1157.16	1333.71	1529.93
345	1047.195	1063.60	1157.90	1335.63	1533.18
346	1047.550	1063.99	1158.87	1337.80	1536.67
347	1047.945	1064.54	1160.11	1340.26	1540.42
348	1048.502	1065.33	1161.66	1343.02	1544.43
349	1049.333	1066.44	1163.57	1346.12	1548.72
350	1050.533	1067.95	1165.87	1349.55	1553.29
351	1052.174	1069.89	1168.58	1353.34	1558.12
352	1054.328	1072.32	1171.72	1357.48	1563.21
353	1057.059	1075.27	1175.29	1361.97	1568.55
354	1060.445	1078.80	1179.29	1366.79	1574.12
355	1064.519	1082.90	1183.71	1371.92	1579.89
356	1069.237	1087.55	1188.54	1377.35	1585.84
357	1074.524	1092.70	1193.74	1383.04	1591.94
358	1080.264	1098.27	1199.29	1388.95	1598.16
359	1086.327	1104.16	1205.10	1395.05	1604.45

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
330	1326.29	1168.43	1063.64	1077.77
331	1331.13	1170.29	1066.80	1081.08
332	1336.34	1174.78	1070.74	1085.05
333	1341.86	1179.85	1075.44	1089.67
334	1347.68	1185.45	1080.83	1094.88
335	1353.73	1191.47	1086.76	1100.62
336	1359.90	1197.69	1092.96	1106.62
337	1366.22	1204.18	1099.51	1112.98
338	1372.65	1210.83	1106.28	1119.56
339	1379.11	1217.55	1113.14	1126.23
340	1385.55	1224.24	1119.95	1132.85
341	1391.91	1230.78	1126.57	1139.28
342	1398.13	1237.08	1132.87	1145.39
343	1404.15	1243.05	1138.75	1151.07
344	1409.94	1248.61	1144.08	1156.23
345	1415.46	1253.65	1148.74	1160.82
346	1420.66	1258.15	1152.70	1164.79
347	1425.54	1262.07	1155.92	1168.16
348	1430.07	1265.45	1158.49	1170.95
349	1434.25	1268.34	1160.48	1173.21
350	1438.08	1270.79	1161.97	1174.99
351	1441.56	1272.85	1163.04	1176.35
352	1444.72	1274.56	1163.78	1177.35
353	1447.55	1276.00	1164.27	1178.05
354	1450.10	1277.26	1164.65	1178.55
355	1452.39	1278.39	1165.00	1178.92
356	1454.45	1279.43	1165.37	1179.20
357	1456.31	1280.40	1165.76	1179.44
358	1458.02	1281.31	1166.16	1179.66
359	1459.60	1282.16	1166.56	1179.87

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
360	1271.92	1448.82	1642.01	1804.59	1905.77
361	1272.40	1450.27	1644.65	1808.42	1910.68
362	1272.88	1451.72	1647.32	1812.27	1915.60
363	1273.37	1453.23	1650.05	1816.18	1920.56
364	1273.89	1454.82	1652.91	1820.19	1925.57
365	1274.50	1456.54	1655.93	1824.32	1930.66
366	1275.24	1458.45	1659.15	1828.62	1935.84
367	1276.21	1460.62	1662.63	1833.10	1941.13
368	1277.47	1463.08	1666.36	1837.78	1946.52
369	1279.05	1465.85	1670.38	1842.66	1951.99
370	1281.01	1468.99	1674.68	1847.73	1957.56
371	1283.42	1472.50	1679.29	1853.00	1963.20
372	1286.30	1476.42	1684.20	1858.46	1968.91
373	1289.71	1480.77	1689.43	1864.10	1974.66
374	1293.69	1485.55	1694.95	1869.90	1980.44
375	1298.29	1490.80	1700.77	1875.85	1986.22
376	1303.58	1496.52	1706.86	1881.92	1991.99
377	1309.68	1502.78	1713.20	1888.08	1997.72
378	1316.63	1509.58	1719.77	1894.32	2003.41
379	1324.38	1516.89	1726.56	1900.62	2009.04
380	1332.84	1524.66	1733.53	1906.97	2014.60
381	1341.92	1532.83	1740.69	1913.36	2020.08
382	1351.52	1541.34	1748.00	1919.79	2025.51
383	1361.52	1550.13	1755.45	1926.25	2030.88
384	1371.80	1559.11	1762.99	1932.73	2036.21
385	1382.20	1568.18	1770.58	1939.22	2041.53
386	1392.57	1577.22	1778.15	1945.70	2046.85
387	1402.78	1586.15	1785.67	1952.18	2052.20
388	1412.67	1594.86	1793.08	1958.63	2057.58
389	1422.13	1603.29	1800.35	1965.04	2063.02

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
360	1092.587	1110.25	1211.09	1401.26	1610.80
361	1098.914	1116.41	1217.14	1407.51	1617.16
362	1105.174	1122.50	1223.13	1413.71	1623.51
363	1111.230	1128.38	1228.94	1419.81	1629.81
364	1116.954	1133.93	1234.47	1425.71	1636.02
365	1122.206	1139.05	1239.65	1431.39	1642.11
366	1126.858	1143.65	1244.43	1436.78	1648.04
367	1130.744	1147.59	1248.74	1441.83	1653.76
368	1133.899	1150.92	1252.60	1446.54	1659.25
369	1136.383	1153.65	1255.99	1450.89	1664.49
370	1138.264	1155.83	1258.90	1454.85	1669.45
371	1139.618	1157.48	1261.35	1458.41	1674.11
372	1140.517	1158.67	1263.33	1461.57	1678.46
373	1141.074	1159.46	1264.89	1464.34	1682.47
374	1141.451	1159.96	1266.05	1466.71	1686.15
375	1141.809	1160.28	1266.87	1468.72	1689.48
376	1142.207	1160.51	1267.43	1470.39	1692.46
377	1142.609	1160.73	1267.90	1471.82	1695.08
378	1143.007	1160.97	1268.35	1473.05	1697.37
379	1143.402	1161.25	1268.80	1474.10	1699.33
380	1143.789	1161.54	1269.23	1474.97	1701.00
381	1144.166	1161.84	1269.62	1475.69	1702.41
382	1144.535	1162.14	1270.00	1476.29	1703.62
383	1144.894	1162.45	1270.36	1476.80	1704.69
384	1145.247	1162.75	1270.70	1477.26	1705.66
385	1145.597	1163.05	1271.04	1477.69	1706.59
386	1145.948	1163.35	1271.39	1478.13	1707.53
387	1146.303	1163.66	1271.74	1478.59	1708.53
388	1146.665	1163.96	1272.10	1479.13	1709.63
389	1147.036	1164.26	1272.48	1479.76	1710.90

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
360	1461.12	1282.98	1166.96	1180.09
361	1462.62	1283.79	1167.37	1180.31
362	1464.13	1284.61	1167.77	1180.52
363	1465.72	1285.47	1168.17	1180.74
364	1467.44	1286.38	1168.57	1180.96
365	1469.31	1287.35	1168.96	1181.20
366	1471.39	1288.40	1169.32	1181.49
367	1473.75	1289.56	1169.68	1181.89
368	1476.39	1290.86	1170.08	1182.44
369	1479.36	1292.41	1170.66	1183.26
370	1482.68	1294.29	1171.56	1184.44
371	1486.38	1296.60	1172.89	1186.06
372	1490.49	1299.39	1174.78	1188.22
373	1495.02	1302.78	1177.34	1191.01
374	1499.99	1306.85	1180.76	1194.54
375	1505.40	1311.71	1185.18	1198.91
376	1511.25	1317.37	1190.66	1204.20
377	1517.53	1323.78	1197.10	1210.45
378	1524.22	1330.89	1204.46	1217.65
379	1531.33	1338.66	1212.68	1225.74
380	1538.82	1347.05	1221.68	1234.63
381	1546.68	1355.98	1231.35	1244.22
382	1554.88	1365.39	1241.59	1254.39
383	1563.36	1375.17	1252.27	1265.01
384	1572.03	1385.22	1263.25	1275.93
385	1580.80	1395.38	1274.37	1286.99
386	1589.55	1405.52	1285.45	1298.02
387	1598.17	1415.50	1296.36	1308.86
388	1606.57	1426.18	1306.92	1319.36
389	1614.67	1434.46	1317.01	1329.37

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
390	1431.07	1611.36	1807.46	1971.42	2068.53
391	1439.39	1619.04	1814.40	1977.76	2074.10
392	1447.04	1626.29	1821.16	1984.06	2079.74
393	1453.92	1633.05	1827.71	1990.29	2085.43
394	1460.02	1639.31	1834.06	1996.46	2091.17
395	1465.38	1645.08	1840.17	2002.54	2098.93
396	1470.12	1650.42	1846.05	2008.51	2102.71
397	1474.31	1655.36	1851.67	2014.37	2108.49
398	1478.01	1659.94	1857.05	2020.09	2114.26
399	1481.27	1664.16	1862.19	2025.68	2120.00
400	1484.12	1668.05	1867.08	2031.13	2125.70
401	1486.62	1671.65	1871.75	2036.44	2131.36
402	1488.81	1674.98	1876.22	2041.62	2136.97
403	1490.76	1678.10	1880.51	2046.68	2142.53
404	1492.51	1681.03	1884.66	2051.65	2148.05
405	1494.11	1683.83	1888.69	2056.53	2153.53
406	1495.61	1686.54	1892.64	2061.37	2158.99
407	1497.07	1689.20	1896.55	2066.17	2164.44
408	1498.54	1691.86	1900.47	2070.98	2169.89
409	1500.05	1694.57	1904.43	2075.82	2175.35
410	1501.68	1697.40	1908.48	2080.72	2180.85
411	1503.48	1700.38	1912.67	2085.71	2186.38
412	1505.49	1703.55	1917.01	2090.81	2191.95
413	1507.77	1706.96	1921.53	2096.03	2197.57
414	1510.38	1710.85	1926.27	2101.38	2203.24
415	1513.35	1714.65	1931.24	2106.87	2208.98
416	1516.76	1718.99	1936.46	2112.51	2214.71
417	1520.65	1723.71	1941.94	2118.29	2220.49
418	1525.09	1728.83	1947.68	2124.20	2226.27
419	1530.16	1734.41	1953.69	2130.23	2232.04

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON	ROW 11 LONGERON
390	1147.416	1164.56	1272.88	1480.51	1712.37	1919.15
391	1147.805	1164.85	1273.31	1481.42	1714.09	1922.21
392	1148.200	1165.12	1273.77	1482.50	1716.10	1925.51
393	1148.599	1165.36	1274.22	1483.74	1718.41	1929.08
394	1149.000	1165.58	1274.69	1485.17	1721.04	1932.91
395	1149.404	1165.80	1275.24	1486.82	1723.98	1937.00
396	1149.767	1166.10	1275.99	1488.75	1727.24	1941.34
397	1150.126	1166.53	1277.02	1490.99	1730.79	1945.90
398	1150.558	1167.15	1278.37	1493.55	1734.63	1950.68
399	1151.201	1168.05	1280.05	1496.44	1738.75	1955.64
400	1152.124	1169.26	1282.06	1499.62	1743.11	1960.77
401	1153.375	1170.81	1284.41	1503.10	1747.71	1966.06
402	1154.963	1172.70	1287.07	1506.85	1752.51	1971.47
403	1156.872	1174.90	1290.01	1510.83	1757.49	1976.99
404	1159.074	1177.38	1293.18	1515.00	1762.60	1982.59
405	1161.519	1180.07	1296.54	1519.32	1767.82	1988.26
406	1164.138	1182.93	1300.03	1523.74	1773.12	1993.96
407	1166.846	1185.87	1303.58	1528.22	1778.45	1999.69
408	1169.552	1188.80	1307.13	1532.69	1783.78	2005.41
409	1172.163	1191.65	1310.61	1537.11	1789.07	2011.11
410	1174.548	1194.29	1313.93	1541.40	1794.27	2016.76
411	1176.674	1196.69	1317.04	1545.52	1799.35	2022.34
412	1178.491	1198.81	1319.90	1549.43	1804.28	2027.83
413	1179.978	1200.60	1322.47	1553.10	1809.02	2033.21
414	1181.126	1202.05	1324.72	1556.50	1813.55	2038.45
415	1181.953	1203.16	1326.62	1559.59	1817.83	2043.53
416	1182.512	1203.95	1328.18	1562.35	1821.85	2048.43
417	1182.902	1204.48	1329.40	1564.79	1825.58	2053.12
418	1183.256	1204.84	1330.29	1566.88	1829.00	2057.58
419	1183.639	1205.09	1330.92	1568.65	1832.08	2061.79

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
390	1622.45	1443.27	1326.53	1338.80
391	1629.86	1451.53	1335.37	1347.53
392	1636.91	1459.21	1343.47	1355.50
393	1643.57	1466.27	1350.77	1362.63
394	1649.85	1472.68	1357.21	1368.88
395	1655.75	1478.42	1362.78	1374.26
396	1661.25	1483.45	1367.43	1378.83
397	1666.37	1487.79	1371.19	1382.64
398	1671.12	1491.51	1374.16	1385.79
399	1675.53	1494.71	1376.51	1388.39
400	1679.61	1497.48	1378.36	1390.51
401	1683.40	1499.88	1379.80	1392.24
402	1686.92	1501.98	1380.92	1393.65
403	1690.23	1503.84	1381.80	1394.80
404	1693.35	1505.53	1382.51	1395.77
405	1696.34	1507.09	1383.11	1396.61
406	1699.24	1508.58	1383.64	1397.36
407	1702.09	1510.03	1384.14	1398.07
408	1704.94	1511.48	1384.64	1398.79
409	1707.84	1512.97	1385.18	1399.55
410	1710.86	1514.57	1385.80	1400.41
411	1714.03	1516.30	1386.55	1401.43
412	1717.40	1518.23	1387.49	1402.65
413	1721.00	1520.41	1388.70	1404.14
414	1724.87	1522.91	1390.25	1405.99
415	1729.06	1525.81	1392.25	1408.25
416	1733.58	1529.19	1394.81	1411.03
417	1738.48	1533.15	1398.08	1414.44
418	1743.78	1537.81	1402.26	1418.60
419	1749.50	1543.22	1407.40	1423.60

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
420	1535.99	1740.49	1959.95	2136.37	2237.79
421	1542.70	1747.14	1966.46	2142.59	2243.49
422	1550.31	1754.36	1973.21	2148.88	2249.13
423	1558.77	1762.13	1980.19	2155.23	2254.69
424	1568.04	1770.42	1987.40	2161.63	2260.16
425	1578.08	1779.24	1994.86	2168.09	2265.52
426	1588.84	1786.58	2002.58	2174.62	2270.79
427	1600.24	1798.34	2010.56	2181.21	2275.96
428	1612.17	1808.52	2018.77	2187.87	2281.05
429	1624.49	1819.01	2027.18	2194.58	2286.07
430	1637.04	1829.68	2035.70	2201.33	2291.06
431	1649.64	1840.38	2044.25	2208.08	2296.05
432	1662.09	1850.97	2052.72	2214.82	2301.05
433	1674.23	1861.31	2061.04	2221.50	2306.11
434	1685.90	1871.30	2069.13	2228.13	2311.23
435	1696.99	1880.85	2076.98	2234.68	2316.45
436	1707.40	1889.92	2084.57	2241.18	2321.77
437	1717.07	1898.48	2091.91	2247.61	2327.18
438	1725.96	1906.53	2099.01	2253.98	2332.69
439	1734.03	1914.05	2105.88	2260.31	2338.29
440	1741.26	1921.02	2112.52	2266.57	2343.96
441	1747.59	1927.43	2118.93	2272.76	2349.68
442	1753.11	1933.31	2125.10	2278.86	2355.44
443	1757.95	1938.73	2131.02	2284.85	2361.22
444	1762.22	1943.73	2136.68	2290.72	2367.01
445	1766.00	1948.36	2142.10	2296.47	2372.78
446	1769.33	1952.64	2147.28	2302.08	2378.52
447	1772.27	1956.61	2152.23	2307.57	2384.23
448	1774.89	1960.31	2156.98	2312.92	2389.91
449	1777.23	1963.77	2161.54	2318.17	2395.54

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERRON	ROW 7 LONGERRON	ROW 8 LONGERRON	ROW 9 LONGERRON	ROW 10 LONGERRON	10
420	1184.041	1205.30	1331.41	1570.16	1834.82	2085.71
421	1184.441	1205.54	1331.86	1571.44	1837.20	2069.34
422	1184.836	1205.82	1332.32	1572.53	1839.23	2072.66
423	1185.223	1206.11	1332.75	1573.40	1840.89	2075.66
424	1185.598	1206.41	1333.13	1574.07	1842.23	2078.37
425	1185.956	1206.71	1333.49	1574.58	1843.28	2080.79
426	1186.297	1207.01	1333.82	1574.94	1844.10	2082.96
427	1186.617	1207.30	1334.12	1575.19	1844.73	2084.92
428	1186.919	1207.58	1334.40	1575.38	1845.24	2086.71
429	1187.206	1207.85	1334.67	1575.51	1845.66	2088.39
430	1187.484	1208.12	1334.93	1575.63	1846.05	2090.00
431	1187.759	1208.38	1335.19	1575.74	1846.42	2091.60
432	1188.041	1208.65	1335.46	1576.86	1846.82	2093.24
433	1188.335	1208.92	1335.73	1576.02	1847.29	2094.97
434	1188.646	1209.21	1336.03	1576.23	1847.85	2096.84
435	1188.977	1209.50	1336.34	1576.54	1848.57	2098.90
436	1189.327	1209.81	1336.68	1576.97	1849.50	2101.20
437	1189.694	1210.11	1337.06	1577.55	1850.68	2103.75
438	1190.075	1210.40	1337.46	1578.32	1852.17	2106.60
439	1190.466	1210.69	1337.90	1579.29	1854.00	2109.75
440	1190.863	1210.95	1338.35	1580.46	1856.18	2113.20
441	1191.264	1211.17	1338.81	1581.83	1858.71	2116.95
442	1191.667	1211.39	1339.33	1583.42	1861.58	2120.98
443	1192.036	1211.66	1340.05	1585.30	1864.78	2125.28
444	1192.392	1212.07	1341.03	1587.49	1868.29	2129.81
445	1192.804	1212.66	1342.33	1590.01	1872.09	2134.55
446	1193.403	1213.50	1343.95	1592.83	1876.16	2139.48
447	1194.254	1214.63	1345.88	1595.95	1880.46	2144.58
448	1195.388	1216.07	1348.12	1599.33	1884.98	2149.81
449	1196.808	1217.79	1350.63	1602.95	1889.68	2155.16

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
420	1755.64	1549.40	1413.53	1429.54
421	1762.21	1556.31	1420.64	1436.47
422	1769.24	1563.96	1428.70	1444.40
423	1776.74	1572.34	1437.69	1453.29
424	1784.72	1581.45	1447.58	1463.09
425	1793.22	1591.27	1458.31	1473.75
426	1802.27	1601.79	1469.81	1485.21
427	1811.85	1612.94	1482.00	1497.37
428	1821.92	1624.64	1494.76	1510.10
429	1832.37	1636.77	1507.94	1523.26
430	1843.06	1649.14	1521.36	1536.66
431	1853.79	1661.56	1534.83	1550.12
432	1864.37	1673.83	1548.15	1563.42
433	1874.64	1685.75	1561.13	1576.38
434	1884.46	1697.19	1573.62	1588.83
435	1893.78	1708.02	1585.47	1600.64
436	1902.55	1718.20	1596.60	1611.71
437	1910.80	1727.67	1606.92	1621.96
438	1918.54	1736.43	1616.38	1631.33
439	1925.82	1744.48	1624.95	1639.79
440	1932.65	1751.81	1632.60	1647.29
441	1939.05	1758.42	1639.31	1653.81
442	1945.03	1764.31	1645.08	1659.38
443	1950.60	1769.47	1649.89	1664.08
444	1955.78	1773.91	1653.78	1668.01
445	1960.58	1777.71	1656.86	1671.25
446	1965.05	1781.01	1659.31	1673.94
447	1969.21	1783.87	1661.27	1676.17
448	1973.10	1786.39	1662.84	1678.03
449	1976.75	1788.63	1664.11	1679.55

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
450	1779.35	1967.03	2165.96	2323.31	2401.13
451	1781.30	1970.15	2170.25	2328.38	2406.69
452	1783.13	1973.16	2174.46	2333.39	2412.23
453	1784.90	1976.12	2178.62	2338.36	2417.76
454	1786.66	1979.06	2182.77	2343.33	2423.28
455	1788.45	1982.04	2186.95	2348.32	2428.81
456	1790.34	1985.10	2191.20	2353.36	2434.36
457	1792.37	1988.29	2195.55	2358.46	2439.94
458	1794.59	1991.65	2200.04	2363.66	2445.55
459	1797.06	1995.22	2204.70	2368.95	2451.20
460	1799.83	1999.05	2209.54	2374.37	2456.90
461	1802.95	2003.16	2214.60	2379.92	2462.62
462	1806.48	2007.60	2219.88	2385.59	2468.38
463	1810.47	2012.39	2225.41	2391.40	2474.16
464	1814.97	2017.56	2231.18	2397.32	2479.94
465	1820.06	2023.15	2237.20	2403.36	2485.72
466	1825.87	2029.22	2243.45	2409.49	2491.47
467	1832.49	2035.81	2249.94	2415.70	2497.17
468	1839.94	2042.93	2256.65	2421.98	2502.83
469	1848.18	2050.56	2263.56	2428.32	2508.41
470	1857.16	2058.66	2270.69	2434.70	2513.91
471	1866.83	2067.22	2278.02	2441.13	2519.32
472	1877.11	2076.21	2285.57	2447.61	2524.66
473	1887.93	2085.56	2293.31	2454.14	2529.91
474	1899.16	2095.22	2301.21	2460.72	2535.11
475	1910.67	2105.08	2309.24	2467.32	2540.28
476	1922.29	2115.04	2317.32	2473.94	2545.40
477	1933.87	2124.95	2325.37	2480.55	2550.54
478	1945.23	2134.70	2333.33	2487.14	2556.72
479	1956.22	2144.19	2341.14	2493.68	2560.95

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CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
450	1198.488	1219.77	1353.37	1894.54	2160.61
451	1200.390	1221.97	1356.30	1899.51	2163.18
452	1202.461	1224.32	1359.37	1904.56	2171.69
453	1204.628	1226.76	1362.51	1909.66	2177.29
454	1206.815	1229.22	1365.67	1914.77	2182.88
455	1208.940	1231.62	1368.78	1919.85	2188.46
456	1210.932	1233.90	1371.78	1924.87	2194.01
457	1212.726	1235.99	1374.62	1929.78	2199.49
458	1214.278	1237.85	1377.25	1934.57	2204.89
459	1215.559	1239.43	1379.63	1942.41	1939.18
460	1216.553	1240.72	1381.72	1943.60	2210.19
461	1217.278	1241.71	1383.50	1948.64	2204.90
462	1217.780	1242.43	1384.98	1951.33	2209.21
463	1218.157	1242.93	1386.13	1955.42	2215.36
464	1218.512	1243.27	1387.00	1958.80	2220.38
465	1218.897	1243.52	1387.62	1961.52	2225.23
466	1219.299	1243.73	1388.11	1964.03	2245.92
467	1219.699	1243.96	1388.56	1966.33	2229.88
468	1220.095	1244.23	1389.02	1661.45	2234.31
469	1220.485	1244.52	1389.45	1662.38	2238.51
470	1220.864	1244.82	1389.85	1663.12	2242.44
471	1221.231	1245.12	1390.22	1664.79	2246.10
472	1221.584	1245.42	1390.57	1664.16	1969.12
473	1221.923	1245.72	1390.90	1664.51	1974.49
474	1222.249	1246.02	1391.20	1664.79	1975.97
475	1222.568	1246.31	1391.50	1665.03	1976.57
476	1222.879	1246.59	1391.80	1665.26	1977.15
477	1223.193	1246.88	1392.09	1665.49	1977.73
478	1223.515	1247.17	1392.40	1665.75	1978.38
479	1223.849	1247.47	1392.72	1666.07	1979.12

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
450	1980.21	1790.86	1685.15	1680.92
451	1983.51	1792.52	1666.04	1682.08
452	1986.72	1794.29	1666.82	1683.12
453	1989.86	1796.00	1687.54	1684.11
454	1993.00	1797.69	1688.26	1685.09
455	1996.17	1799.42	1689.01	1686.10
456	1999.42	1801.24	1689.84	1687.20
457	2002.80	1803.18	1670.80	1688.43
458	2006.35	1805.30	1671.94	1689.87
459	2010.11	1807.68	1673.35	1691.57
460	2014.12	1810.35	1675.10	1693.60
461	2018.43	1813.41	1677.28	1696.04
462	2023.05	1816.93	1680.01	1698.97
463	2028.02	1821.00	1683.43	1702.50
464	2033.36	1825.74	1687.70	1706.74
465	2039.09	1831.19	1692.88	1711.78
466	2045.22	1837.34	1698.99	1717.69
467	2051.75	1844.17	1706.00	1724.52
468	2058.70	1851.70	1713.90	1732.28
469	2066.07	1859.89	1722.65	1740.92
470	2073.87	1868.73	1732.22	1750.40
471	2082.11	1878.21	1742.53	1760.64
472	2090.79	1888.26	1753.52	1771.57
473	2099.88	1898.83	1765.08	1783.09
474	2109.32	1909.81	1777.10	1795.06
475	2119.00	1921.08	1789.41	1807.34
476	2128.78	1932.47	1801.84	1819.74
477	2138.52	1943.80	1814.22	1832.09
478	2148.07	1954.92	1826.37	1844.21
479	2157.31	1965.66	1838.13	1855.92

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
480	1966.72	2153.32	2348.76	2500.18	2566.25
481	1976.60	2162.03	2356.17	2506.63	2571.64
482	1985.79	2170.27	2363.35	2513.03	2577.11
483	1994.22	2178.02	2370.33	2519.37	2582.68
484	2001.84	2185.25	2377.08	2525.67	2588.31
485	2008.57	2191.91	2383.59	2531.89	2594.02
486	2014.41	2198.00	2389.86	2538.03	2599.76
487	2019.46	2203.56	2395.86	2544.06	2605.54
488	2023.85	2208.65	2401.58	2549.96	2611.32
489	2027.66	2213.30	2407.01	2555.71	2617.09
490	2030.93	2217.54	2412.16	2561.31	2622.84
491	2033.72	2221.38	2417.02	2566.73	2628.53
492	2036.09	2224.87	2421.60	2571.99	2634.16
493	2038.07	2228.01	2425.92	2577.07	2639.73
494	2039.73	2230.87	2429.99	2581.99	2645.23
495	2041.13	2233.46	2433.85	2586.75	2650.66
496	2042.36	2235.84	2437.52	2591.38	2656.02
497	2043.31	2238.04	2441.02	2595.89	2661.32
498	2044.20	2240.12	2444.41	2600.31	2666.57
499	2045.01	2242.12	2447.72	2604.67	2671.79
500	2045.80	2244.08	2450.99	2609.01	2676.99
501	2046.60	2246.04	2454.27	2613.35	2682.20
502	2047.44	2248.07	2457.60	2617.73	2687.43
503	2048.36	2250.18	2461.03	2622.18	2692.69
504	2049.42	2252.44	2464.59	2626.72	2698.01
505	2050.66	2254.88	2468.31	2631.39	2703.39
506	2052.12	2257.54	2472.22	2636.20	2708.84
507	2053.85	2260.46	2476.36	2641.16	2714.36
508	2055.90	2263.67	2480.72	2646.27	2719.94
509	2058.32	2267.20	2485.34	2651.54	2725.58

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
480	1224.196	1247.77	1393.05	1666.48	1980.02
481	1224.559	1248.08	1393.42	1667.02	1981.13
482	1224.935	1248.37	1393.81	1667.71	1982.50
483	1225.322	1248.67	1394.23	1668.59	1984.18
484	1225.717	1248.94	1394.69	1669.67	1986.20
485	1226.117	1249.18	1395.14	1670.95	1988.57
486	1226.519	1249.39	1395.63	1672.45	1991.31
487	1226.901	1249.64	1396.27	1674.23	1994.40
488	1227.256	1250.01	1397.19	1676.35	1997.84
489	1227.660	1250.58	1398.46	1678.85	2001.62
490	1228.291	1251.47	1400.13	1681.71	2005.72
491	1229.266	1252.74	1402.19	1684.95	2010.13
492	1230.659	1254.43	1404.68	1688.54	2014.82
493	1232.514	1256.58	1407.57	1692.48	2019.76
494	1234.859	1259.19	1410.85	1696.75	2024.94
495	1237.704	1262.25	1414.50	1701.30	2030.33
496	1241.050	1265.73	1418.48	1706.10	2035.88
497	1244.845	1269.60	1422.73	1711.11	2041.57
498	1248.993	1273.77	1427.20	1716.28	2047.36
499	1253.377	1278.13	1431.82	1721.55	2053.22
500	1257.868	1282.59	1436.50	1726.87	2059.10
501	1262.333	1287.02	1441.17	1732.18	2064.98
502	1266.644	1291.33	1445.74	1737.43	2070.82
503	1270.680	1295.40	1450.14	1742.54	2076.58
504	1274.333	1299.15	1454.31	1747.49	2082.23
505	1277.524	1302.50	1458.19	1752.22	2087.73
506	1280.230	1305.44	1461.74	1756.69	2093.06
507	1282.457	1307.93	1464.93	1760.88	2098.19
508	1284.223	1310.00	1467.75	1764.76	2103.09
509	1285.565	1311.64	1470.18	1768.31	2107.74

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
480	2166.14	1975.91	1849.34	1019.84
481	2174.54	1985.59	1859.89	1021.84
482	2182.47	1994.62	1869.69	1023.86
483	2189.95	2002.98	1878.66	1025.90
484	2196.98	2010.64	1886.73	1027.98
485	2203.57	2017.57	1893.86	1030.08
486	2209.71	2023.75	1900.00	1032.21
487	2215.42	2029.15	1905.12	1034.36
488	2220.68	2033.74	1909.21	1036.53
489	2225.52	2037.59	1912.35	1038.72
490	2229.94	2040.82	1914.73	1040.92
491	2233.97	2043.52	1916.50	1043.12
492	2237.64	2045.79	1917.80	1045.33
493	2240.98	2047.69	1918.71	1047.53
494	2244.03	2049.30	1919.35	1049.73
495	2246.81	2050.70	1919.81	1051.92
496	2249.38	2051.96	1920.19	1054.11
497	2251.77	2053.13	1920.56	1056.28
498	2254.03	2054.25	1920.90	1058.46
499	2256.20	2055.33	1921.26	1060.62
500	2258.34	2056.40	1921.62	1062.79
501	2260.48	2057.48	1921.97	1064.95
502	2262.68	2058.57	1922.33	1067.12
503	2264.99	2059.70	1922.68	1069.29
504	2267.43	2060.90	1923.04	1071.47
505	2270.06	2062.20	1923.44	1073.68
506	2272.91	2063.85	1923.94	1075.85
507	2276.02	2065.33	1924.64	1078.06
508	2279.42	2067.29	1925.61	1080.28
509	2283.13	2069.60	1926.96	1082.46

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
510	2061.13	2271.06	2490.21	2656.98	2731.28
511	2064.38	2275.28	2495.34	2662.57	2737.02
512	2068.11	2279.87	2500.73	2668.30	2742.79
513	2072.32	2284.83	2506.37	2674.16	2748.57
514	2077.06	2290.18	2512.25	2680.13	2754.35
515	2082.37	2295.91	2518.35	2686.21	2760.12
516	2088.30	2302.06	2524.64	2692.35	2765.86
517	2094.85	2308.60	2531.10	2698.56	2771.57
518	2101.96	2315.51	2537.72	2704.81	2777.25
519	2109.54	2322.71	2544.46	2711.10	2782.89
520	2117.47	2330.14	2551.29	2717.42	2788.51
521	2125.63	2337.71	2558.19	2723.75	2794.09
522	2133.89	2345.35	2565.11	2730.08	2799.67
523	2142.12	2352.97	2572.03	2736.42	2805.26
524	2150.19	2360.49	2578.90	2742.74	2810.85
525	2157.98	2367.82	2585.70	2749.05	2816.48
526	2165.35	2374.89	2592.38	2755.32	2822.14
527	2172.18	2381.61	2598.92	2761.55	2827.83
528	2178.37	2387.94	2605.29	2767.73	2833.56
529	2183.90	2393.82	2611.46	2773.83	2839.32
530	2188.79	2399.27	2617.40	2779.83	2845.10
531	2193.10	2404.30	2623.08	2785.71	2850.88
532	2196.84	2408.90	2628.48	2791.45	2856.65
533	2199.98	2413.03	2633.55	2797.00	2862.38
534	2202.61	2418.74	2638.30	2802.36	2868.06
535	2204.75	2420.03	2642.74	2807.52	2873.66
536	2206.45	2422.92	2646.84	2812.46	2879.17
537	2207.75	2425.42	2650.61	2817.16	2884.57
538	2208.69	2427.56	2654.06	2821.63	2889.84
539	2209.37	2429.38	2657.19	2825.85	2894.98

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
510	1286.520	1312.89	1472.23	1771.53	2112.13
511	1287.164	1313.79	1473.91	1774.41	2116.25
512	1287.588	1314.40	1475.24	1776.96	2120.08
513	1287.946	1314.82	1476.26	1779.18	2123.62
514	1288.309	1315.11	1477.01	1781.11	2126.87
515	1288.709	1315.34	1477.57	1782.78	2129.84
516	1289.111	1315.56	1478.05	1784.26	2132.54
517	1289.511	1315.78	1478.51	1785.58	2134.98
518	1289.910	1316.04	1478.96	1786.77	2137.20
519	1290.305	1316.31	1479.42	1787.86	2139.24
520	1290.698	1316.59	1479.86	1788.87	2141.13
521	1291.088	1316.88	1480.30	1789.82	2142.92
522	1291.477	1317.17	1480.73	1790.74	2144.67
523	1291.867	1317.46	1481.16	1791.67	2146.43
524	1292.258	1317.74	1481.60	1792.64	2148.26
525	1292.652	1318.02	1482.05	1793.68	2150.21
526	1293.049	1318.29	1482.51	1794.82	2152.33
527	1293.448	1318.53	1482.96	1796.07	2154.66
528	1293.849	1318.74	1483.43	1797.48	2157.24
529	1294.252	1318.96	1483.95	1799.07	2160.11
530	1294.624	1319.23	1484.64	1800.92	2163.29
531	1294.979	1319.63	1485.61	1803.10	2166.78
532	1295.397	1320.23	1486.93	1805.64	2170.60
533	1296.109	1321.20	1488.69	1808.60	2174.78
534	1297.231	1322.63	1490.92	1811.97	2179.29
535	1298.879	1324.58	1493.63	1815.76	2184.13
536	1301.166	1327.13	1496.87	1819.99	2189.28
537	1304.214	1330.37	1500.66	1824.65	2194.74
538	1308.183	1334.38	1505.02	1829.73	2200.48
539	1313.101	1339.21	1509.98	1835.25	2206.44

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
510	2287.19	2072.33	1928.76	1948.91
511	2291.59	2075.53	1931.12	1951.50
512	2296.36	2079.27	1934.12	1954.68
513	2301.50	2083.65	1937.92	1958.53
514	2307.00	2088.68	1942.57	1963.10
515	2312.86	2094.36	1948.06	1968.41
516	2319.06	2100.62	1954.31	1974.46
517	2325.56	2107.40	1961.25	1981.21
518	2332.33	2114.64	1968.78	1988.59
519	2339.35	2122.27	1976.82	1996.49
520	2346.55	2130.19	1985.23	2004.78
521	2353.87	2138.31	1993.89	2013.33
522	2361.25	2146.52	2002.67	2022.00
523	2368.62	2154.71	2011.41	2030.63
524	2375.90	2162.76	2019.98	2039.09
525	2383.02	2170.56	2028.24	2047.22
526	2389.93	2178.01	2036.05	2054.88
527	2396.56	2185.02	2043.28	2061.94
528	2402.89	2191.50	2049.83	2068.30
529	2408.87	2197.40	2055.60	2073.88
530	2414.47	2202.61	2060.49	2078.65
531	2419.67	2207.10	2064.43	2082.62
532	2424.46	2210.87	2067.47	2085.83
533	2428.78	2213.95	2069.67	2088.29
534	2432.67	2216.48	2071.26	2090.16
535	2436.16	2218.53	2072.33	2091.52
536	2439.23	2220.17	2072.99	2092.43
537	2441.92	2221.50	2073.41	2093.02
538	2444.25	2222.65	2073.76	2093.40
539	2446.23	2223.66	2074.13	2093.67

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
540	2209.88	2430.95	2660.02	2829.83	2899.98
541	2210.35	2432.33	2662.56	2833.58	2904.84
542	2210.80	2433.56	2664.84	2837.11	2909.56
543	2211.26	2434.67	2666.91	2840.45	2914.17
544	2211.70	2435.68	2668.80	2843.64	2918.67
545	2212.14	2436.61	2670.56	2846.72	2923.09
546	2212.56	2437.50	2672.25	2849.73	2927.47
547	2212.99	2438.38	2673.93	2852.73	2931.84
548	2213.42	2439.29	2675.64	2855.76	2936.23
549	2213.86	2440.25	2677.45	2858.88	2940.68
550	2214.31	2441.29	2679.40	2862.12	2945.22
551	2214.77	2442.44	2681.54	2865.52	2949.86
552	2215.22	2443.72	2683.90	2869.12	2954.62
553	2215.69	2445.14	2686.51	2872.92	2959.52
554	2216.22	2446.75	2689.39	2876.95	2964.54
555	2216.92	2448.60	2692.55	2881.20	2969.70
556	2217.87	2450.75	2696.00	2885.67	2974.98
557	2219.13	2453.21	2699.75	2890.35	2980.37
558	2220.73	2456.00	2703.77	2895.23	2985.85
559	2222.68	2459.12	2708.07	2900.30	2991.41
560	2225.02	2462.58	2712.63	2905.54	2997.04
561	2227.73	2466.35	2717.44	2910.93	3002.73
562	2230.80	2470.43	2722.47	2916.46	3008.45
563	2234.23	2474.80	2727.70	2922.11	3014.20
564	2237.99	2479.41	2733.11	2927.85	3019.98
565	2242.02	2484.24	2738.86	2933.87	3025.75
566	2246.28	2489.23	2744.32	2939.54	3031.54
567	2250.71	2494.35	2750.06	2945.45	3037.32
568	2255.23	2499.53	2755.84	2951.38	3043.10
569	2259.76	2504.73	2761.62	2957.31	3048.89

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
540	1318.916	1344.85	1515.58	1841.21	2212.72
541	1325.618	1351.29	1521.88	1847.61	2219.15
542	1332.816	1358.44	1528.81	1854.43	2225.77
543	1340.700	1366.22	1536.30	1861.60	2232.53
544	1349.049	1374.47	1544.22	1869.05	2239.41
545	1357.731	1383.06	1552.45	1876.69	2246.37
546	1366.614	1391.87	1560.85	1884.45	2253.38
547	1375.534	1400.70	1569.29	1892.23	2260.40
548	1384.346	1409.43	1577.63	1899.95	2267.39
549	1392.910	1417.96	1585.74	1907.52	2274.33
550	1401.097	1425.99	1593.52	1914.87	2281.16
551	1408.789	1433.56	1600.82	1921.93	2287.88
552	1415.884	1440.51	1607.57	1928.62	2294.44
553	1422.295	1446.75	1613.69	1934.92	2300.83
554	1427.953	1452.24	1619.17	1940.79	2307.02
555	1432.770	1458.98	1624.06	1946.26	2313.00
556	1436.726	1460.98	1628.41	1951.34	2318.73
557	1439.866	1464.29	1632.26	1956.05	2324.22
558	1442.325	1467.01	1635.63	1960.38	2329.45
559	1444.218	1469.19	1638.55	1964.34	2334.42
560	1445.846	1470.92	1641.07	1967.97	2339.12
561	1446.694	1472.27	1643.21	1971.27	2343.58
562	1447.448	1473.29	1645.03	1974.28	2347.81
563	1447.995	1474.07	1646.57	1977.03	2351.81
564	1448.411	1474.67	1647.89	1979.56	2355.62
565	1448.783	1475.15	1649.02	1981.90	2359.27
566	1449.139	1475.56	1650.01	1984.10	2362.79
567	1449.494	1475.92	1650.91	1986.20	2366.21
568	1449.849	1476.25	1651.76	1988.25	2369.58
569	1450.206	1476.59	1652.61	1990.29	2372.94

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
540	2447.91	2224.56	2074.53	2093.89
541	2449.31	2225.32	2074.94	2094.11
542	2450.47	2225.97	2075.33	2094.35
543	2451.43	2226.52	2075.73	2094.62
544	2452.25	2227.00	2076.12	2094.90
545	2452.96	2227.43	2076.51	2095.19
546	2453.62	2227.83	2076.90	2095.48
547	2454.26	2228.23	2077.29	2095.77
548	2454.93	2228.64	2077.68	2096.06
549	2455.68	2229.08	2078.07	2096.35
550	2456.55	2229.59	2078.46	2096.63
551	2457.58	2230.17	2078.86	2096.89
552	2458.81	2230.85	2079.26	2097.12
553	2460.27	2231.65	2079.66	2097.34
554	2462.00	2232.57	2080.06	2097.56
555	2464.03	2233.60	2080.43	2097.84
556	2466.36	2234.74	2080.79	2098.22
557	2469.01	2236.05	2081.19	2098.79
558	2471.99	2237.61	2081.78	2099.61
559	2475.30	2239.48	2082.67	2100.78
560	2478.95	2241.72	2083.93	2102.33
561	2482.91	2244.33	2085.61	2104.29
562	2487.18	2247.34	2087.73	2106.68
563	2491.72	2250.75	2090.33	2109.49
564	2496.52	2254.53	2093.38	2112.71
565	2501.52	2258.67	2096.88	2116.31
566	2506.69	2263.10	2100.76	2120.22
567	2511.98	2267.75	2104.90	2124.36
568	2517.34	2272.51	2109.20	2128.63
569	2522.70	2277.29	2113.52	2132.92

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW	1 LONGERON	1	ROW	2 LONGERON	2	ROW	3 LONGERON	3	ROW	4 LONGERON	4	ROW	5 LONGERON	5
570	2264.23	2509.88	2767.38	2963.23	3054.67	2956.31	2732.71	2368.12	1983.57	1655.96					
571	2268.55	2514.92	2773.07	2969.12	3060.45	2961.61	2737.25	2371.58	1985.88	1657.10					
572	2272.66	2519.80	2778.66	2974.95	3066.24	2966.95	2741.86	2375.17	1988.32	1658.30					
573	2276.50	2524.48	2784.11	2980.72	3072.01	2972.36	2746.60	2378.92	1990.93	1659.59					
574	2280.02	2528.91	2789.39	2986.39	3077.77	2977.82	2751.46	2382.87	1993.77	1661.03					
575	2283.17	2533.05	2794.47	2991.94	3083.50	2983.35	2756.46	2387.03	1996.86	1662.70					
576	2285.94	2536.88	2799.31	2997.36	3089.19	2988.94	2761.63	2391.44	2000.25	1664.67					
577	2288.37	2540.41	2803.93	3002.64	3094.83	2994.58	2766.93	2396.06	2003.92	1666.95					
578	2290.38	2543.59	2808.28	3007.74	3100.41	3000.26	2772.39	2400.95	2007.95	1669.67					
579	2292.00	2546.40	2812.32	3012.63	3105.90	3005.99	2778.02	2406.12	2012.37	1672.92					
580	2293.24	2548.84	2816.04	3017.30	3111.28	3011.73	2783.80	2411.56	2017.20	1676.79					
581	2294.13	2550.92	2819.43	3021.72	3116.53	3017.47	2789.72	2417.25	2022.46	1681.42					
582	2294.74	2552.66	2822.47	3025.87	3121.63	3023.19	2795.76	2423.20	2028.16	1686.85					
583	2295.22	2554.12	2825.14	3029.73	3126.56	3028.87	2801.90	2429.40	2034.30	1693.07					
584	2295.67	2555.37	2827.46	3033.29	3131.30	3034.49	2808.13	2435.84	2040.88	1700.03					
585	2296.13	2556.43	2829.42	3036.54	3135.84	3040.02	2814.44	2442.52	2047.91	1707.74					
586	2296.55	2557.27	2831.04	3039.49	3140.18	3045.47	2820.81	2449.45	2055.39	1716.15					
587	2296.94	2557.94	2832.36	3042.16	3144.30	3050.81	2827.22	2456.63	2063.35	1725.26					
588	2297.29	2558.44	2833.41	3044.57	3148.23	3056.04	2833.67	2464.06	2071.77	1735.02					
589	2297.63	2558.83	2834.26	3046.76	3151.97	3061.18	2840.16	2471.75	2080.66	1745.37					
590	2297.94	2559.13	2834.96	3048.78	3155.56	3066.22	2846.68	2479.67	2089.97	1756.23					
591	2298.24	2559.36	2835.56	3050.69	3159.03	3071.20	2853.22	2487.78	2099.61	1767.48					
592	2298.53	2559.57	2836.10	3052.52	3162.43	3076.13	2859.77	2496.00	2109.46	1778.96					
593	2298.81	2559.77	2836.64	3054.34	3165.82	3081.05	2866.32	2504.24	2119.35	1790.49					
594	2299.11	2559.99	2837.20	3056.19	3169.25	3086.00	2872.87	2512.42	2129.13	1801.90					
595	2299.41	2560.25	2837.83	3058.14	3172.78	3091.00	2879.40	2520.46	2138.85	1813.01					
596	2299.73	2560.57	2838.58	3060.22	3176.40	3096.08	2885.90	2528.30	2147.81	1823.69					
597	2300.07	2561.00	2839.50	3062.49	3180.21	3101.25	2892.38	2535.90	2156.53	1833.84					
598	2300.44	2561.55	2840.63	3064.98	3184.20	3106.52	2898.82	2543.25	2164.80	1843.39					
599	2300.83	2562.27	2842.03	3067.72	3188.39	3111.89	2905.22	2550.35	2172.62	1852.29					

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
570	1450.559	1476.94	1653.49	1992.37	2376.34
571	1450.914	1477.33	1654.44	1994.53	2379.82
572	1451.279	1477.78	1655.52	1996.82	2383.43
573	1451.678	1478.34	1656.78	1999.29	2387.19
574	1452.185	1479.06	1658.26	2001.98	2391.14
575	1452.889	1480.03	1660.01	2004.94	2395.32
576	1453.884	1481.32	1662.10	2008.19	2399.74
577	1455.213	1482.96	1664.53	2011.74	2404.38
578	1457.023	1485.06	1667.38	2015.85	2409.31
579	1459.444	1487.74	1670.72	2019.95	2414.52
580	1462.632	1491.09	1674.60	2024.68	2420.02
581	1466.783	1495.26	1679.07	2029.85	2425.81
582	1471.979	1500.33	1684.21	2035.50	2431.89
583	1478.198	1506.38	1690.17	2041.68	2438.23
584	1485.405	1513.44	1697.02	2048.44	2444.82
585	1493.570	1521.50	1704.77	2055.78	2451.65
586	1502.635	1530.49	1713.34	2063.65	2458.71
587	1512.545	1540.34	1722.68	2072.02	2465.99
588	1523.225	1550.98	1732.72	2080.86	2473.50
589	1534.578	1562.30	1743.38	2090.14	2481.23
590	1546.485	1574.19	1754.55	2099.78	2489.17
591	1558.799	1586.49	1766.10	2109.70	2497.26
592	1571.352	1599.04	1777.88	2119.79	2505.45
593	1583.959	1611.63	1789.70	2129.92	2513.67
594	1596.435	1624.10	1801.40	2139.96	2521.83
595	1608.607	1636.26	1812.82	2149.78	2529.87
596	1620.318	1647.94	1823.81	2159.30	2537.73
597	1631.442	1659.03	1834.26	2168.42	2545.38
598	1641.877	1669.42	1844.08	2177.11	2562.82
599	1651.546	1679.03	1853.20	2185.34	2580.03

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
570	2528.02	2281.98	2117.73	1212.80
571	2533.24	2286.50	2121.71	1214.97
572	2538.30	2290.73	2125.34	1214.82
573	2543.16	2294.62	2128.53	1218.15
574	2547.77	2298.13	2131.24	1215.07
575	2552.10	2301.22	2133.46	1213.54
576	2556.11	2303.90	2135.21	1215.57
577	2559.83	2306.22	2136.57	1217.22
578	2563.20	2308.15	2137.51	1218.45
579	2566.20	2309.73	2138.12	1219.30
580	2568.83	2311.03	2138.52	1219.85
581	2571.09	2312.14	2138.87	1220.20
582	2572.99	2313.13	2139.25	1220.45
583	2574.52	2313.95	2139.66	1220.66
584	2575.71	2314.61	2140.05	1220.90
585	2576.58	2315.12	2140.45	1221.18
586	2577.18	2315.50	2140.83	1221.47
587	2577.57	2315.77	2141.21	1221.77
588	2577.81	2315.96	2141.57	1222.08
589	2577.96	2316.11	2141.91	1222.38
590	2578.07	2316.24	2142.24	1222.67
591	2578.19	2316.37	2142.56	1222.96
592	2578.31	2316.50	2142.87	1223.25
593	2578.43	2316.63	2143.18	1223.53
594	2578.55	2316.76	2143.49	1223.82
595	2578.66	2316.89	2143.81	1224.11
596	2578.79	2317.02	2144.14	1224.41
597	2578.96	2317.19	2144.49	1224.71
598	2579.24	2317.40	2144.86	1225.01
599	2579.68	2317.70	2145.23	1225.31

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
600	2301.26	2563.17	2843.74	3070.75	3192.77
601	2301.72	2564.26	2845.77	3074.06	3197.35
602	2302.17	2565.53	2848.13	3077.65	3202.12
603	2302.66	2567.01	2850.83	3081.53	3207.06
604	2303.26	2568.74	2853.85	3085.67	3212.15
605	2304.10	2570.76	2857.18	3090.05	3217.38
606	2305.23	2573.09	2860.81	3094.65	3222.72
607	2306.67	2575.73	2864.70	3099.44	3228.16
608	2308.42	2578.67	2868.85	3104.41	3233.68
609	2310.47	2581.88	2873.22	3109.52	3239.27
610	2312.81	2585.33	2877.78	3114.76	3244.90
611	2315.39	2589.00	2882.50	3120.10	3250.56
612	2318.18	2592.84	2887.36	3125.53	3256.26
613	2321.13	2596.82	2892.32	3131.01	3261.97
614	2324.18	2600.88	2897.34	3136.53	3267.69
615	2327.27	2604.97	2902.38	3142.07	3273.42
616	2330.33	2609.04	2907.40	3147.59	3279.14
617	2333.31	2613.03	2912.37	3153.09	3284.86
618	2336.14	2616.91	2917.26	3158.53	3290.56
619	2338.78	2620.62	2922.02	3163.89	3296.23
620	2341.18	2624.13	2926.62	3169.16	3301.87
621	2343.29	2627.40	2931.04	3174.31	3307.46
622	2345.11	2630.40	2935.23	3179.31	3313.00
623	2346.61	2633.10	2939.18	3184.14	3318.46
624	2347.80	2635.49	2942.86	3188.77	3323.82
625	2348.68	2637.57	2946.24	3193.19	3329.07
626	2349.32	2639.33	2949.31	3197.37	3334.19
627	2349.81	2640.84	2952.05	3201.28	3339.14
628	2350.27	2642.13	2954.44	3204.90	3343.93
629	2350.72	2643.23	2956.49	3208.23	3348.52

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
600	1660.393	1687.79	2193.08	2567.04	2907.74
601	1668.374	1695.66	2200.31	2573.82	2914.09
602	1675.456	1702.60	1875.89	2207.00	2580.38
603	1681.625	1708.59	1881.80	2213.15	2586.71
604	1686.869	1713.70	1886.97	2218.82	2592.80
605	1691.180	1718.01	1891.54	2224.06	2598.63
606	1694.638	1721.59	1895.59	2228.92	2604.22
607	1697.387	1724.56	1899.17	2233.41	2609.57
608	1699.588	1727.04	1902.34	2237.58	2614.68
609	1701.352	1729.10	1905.16	2241.46	2619.58
610	1702.778	1730.83	1907.67	2245.08	2624.29
611	1703.945	1732.30	1909.94	2248.49	2628.83
612	1704.921	1733.57	1912.01	2251.73	2633.23
613	1705.769	1734.70	1913.94	2254.84	2637.54
614	1706.541	1735.75	1915.78	2257.87	2641.78
615	1707.287	1736.76	1917.59	2260.87	2645.99
616	1708.050	1737.80	1919.42	2263.89	2650.22
617	1708.876	1738.91	1921.32	2266.98	2654.51
618	1709.817	1740.14	1923.35	2270.19	2658.89
619	1710.932	1741.55	1925.57	2273.55	2663.39
620	1712.292	1743.22	1928.02	2277.12	2668.06
621	1713.972	1745.20	1930.76	2280.94	2672.91
622	1716.069	1747.67	1933.85	2285.04	2677.98
623	1718.698	1750.44	1937.35	2289.47	2683.28
624	1722.010	1753.90	1941.30	2294.25	2688.82
625	1726.168	1758.07	1945.78	2299.43	2694.61
626	1731.268	1763.06	1950.86	2305.03	2700.66
627	1737.323	1768.94	1956.67	2311.12	2706.96
628	1744.320	1775.78	1963.32	2317.76	2713.50
629	1752.267	1783.61	1970.86	2324.96	2720.27

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
600	2580 .35	2318 .10	2145 .62	2165 .60
601	2581 .28	2318 .64	2146 .02	2165 .88
602	2582 .51	2319 .32	2146 .42	2166 .11
603	2584 .06	2320 .16	2146 .82	2166 .33
604	2585 .94	2321 .14	2147 .21	2166 .57
605	2588 .14	2322 .23	2147 .56	2166 .90
606	2590 .66	2323 .47	2147 .93	2167 .38
607	2593 .49	2324 .90	2148 .42	2168 .08
608	2596 .62	2326 .59	2149 .13	2169 .05
609	2600 .02	2328 .55	2150 .11	2170 .31
610	2603 .66	2330 .79	2151 .38	2171 .86
611	2607 .52	2333 .28	2152 .91	2173 .68
612	2611 .55	2335 .98	2154 .68	2175 .74
613	2615 .72	2338 .84	2156 .64	2177 .97
614	2619 .96	2341 .83	2158 .74	2180 .33
615	2624 .24	2344 .85	2160 .88	2182 .73
616	2628 .50	2347 .85	2162 .99	2185 .09
617	2632 .68	2350 .75	2164 .99	2187 .36
618	2636 .75	2353 .49	2166 .81	2189 .46
619	2640 .65	2356 .03	2168 .40	2191 .34
620	2644 .35	2358 .33	2169 .73	2192 .96
621	2647 .81	2360 .35	2170 .78	2194 .29
622	2651 .00	2362 .10	2171 .54	2195 .32
623	2653 .89	2363 .58	2172 .07	2196 .07
624	2656 .47	2364 .85	2172 .45	2196 .59
625	2658 .72	2365 .97	2172 .81	2196 .94
626	2660 .65	2366 .96	2173 .19	2197 .19
627	2662 .24	2367 .82	2173 .59	2197 .41
628	2663 .50	2368 .51	2173 .99	2197 .64
629	2664 .45	2369 .06	2174 .38	2197 .91

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
630	2351.15	2644.13	2958.19	3211.25	3352.90
631	2351.55	2644.83	2959.57	3213.97	3357.08
632	2351.91	2645.36	2960.66	3216.42	3361.03
633	2352.24	2645.75	2961.52	3218.62	3364.78
634	2352.55	2646.03	2962.18	3220.61	3368.33
635	2352.84	2646.23	2962.72	3222.43	3371.72
636	2353.11	2646.38	2963.17	3224.13	3374.98
637	2353.38	2646.51	2963.57	3225.76	3378.17
638	2353.64	2646.63	2963.97	3227.37	3381.35
639	2353.91	2646.77	2964.39	3229.03	3384.56
640	2354.19	2646.94	2964.87	3230.77	3387.88
641	2354.48	2647.17	2965.45	3232.66	3391.33
642	2354.80	2647.50	2966.20	3234.74	3394.97
643	2355.15	2647.95	2967.16	3237.05	3398.82
644	2355.53	2648.56	2968.39	3239.64	3402.88
645	2355.94	2649.36	2969.93	3242.51	3407.16
646	2356.39	2650.37	2971.82	3245.70	3411.66
647	2356.84	2651.58	2974.07	3249.20	3416.37
648	2357.31	2653.00	2976.68	3253.01	3421.26
649	2357.88	2654.68	2979.65	3257.10	3426.33
650	2358.70	2656.67	2982.95	3261.46	3431.55
651	2359.83	2659.01	2986.58	3266.06	3436.89
652	2361.32	2661.70	2990.52	3270.88	3442.35
653	2363.17	2664.47	2994.74	3275.90	3447.89
654	2365.38	2668.07	2999.22	3281.09	3453.50
655	2367.93	2671.72	3003.93	3286.42	3459.16
656	2370.81	2675.63	3008.84	3291.88	3464.87
657	2373.97	2679.78	3013.92	3297.43	3470.60
658	2377.37	2681.12	3019.14	3303.07	3476.35
659	2380.98	2688.60	3024.45	3308.76	3482.11

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
630	1761.105	1792.38	2332.70	2727.28	3077.86
631	1770.834	1802.04	2340.96	2734.51	3084.32
632	1781.400	1812.56	2349.73	2741.98	3090.82
633	1792.740	1823.87	2008.99	2359.00	3097.40
634	1804.768	1835.88	2020.28	2368.73	3104.03
635	1817.370	1848.48	2032.10	2378.85	2757.69
636	1830.397	1861.50	2044.31	2389.28	2765.91
637	1843.679	1874.78	2056.77	2399.90	2774.31
638	1857.017	1888.12	2069.28	2410.56	2782.83
639	1870.213	1901.31	2081.66	2421.11	2799.86
640	1883.073	1914.17	2093.72	2431.42	2808.18
641	1895.435	1926.52	2105.31	2441.38	2816.30
642	1907.161	1938.22	2116.32	2450.90	2824.16
643	1918.143	1949.17	2126.64	2459.94	2831.77
644	1928.304	1959.27	2136.20	2468.46	2839.12
645	1937.583	1968.48	2144.97	2476.45	2846.24
646	1945.938	1976.74	2152.89	2483.90	2853.12
647	1953.328	1983.99	2159.91	2490.77	2859.75
648	1959.733	1990.23	2166.03	2497.07	2866.14
649	1965.144	1995.49	2171.32	2502.81	2872.27
650	1969.530	1999.86	2175.94	2508.09	2878.13
651	1972.972	2003.43	2179.97	2512.93	2883.71
652	1975.629	2006.32	2183.49	2517.38	2889.02
653	1977.678	2008.65	2186.54	2521.45	2894.07
654	1979.247	2010.52	2189.18	2525.19	2898.86
655	1980.441	2012.02	2191.48	2528.62	2903.42
656	1981.345	2013.21	2193.47	2531.79	2907.77
657	1982.045	2014.17	2195.22	2534.73	2911.94
658	1982.606	2014.97	2196.78	2537.51	2915.96
659	1983.082	2015.65	2198.21	2540.15	2919.87

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
630	2665.11	2369.46	2174.77	2198.20
631	2665.54	2369.75	2175.15	2198.50
632	2665.80	2369.96	2175.51	2198.80
633	2665.95	2370.11	2175.86	2199.10
634	2666.06	2370.24	2176.18	2199.40
635	2666.18	2370.37	2176.49	2199.68
636	2666.34	2370.51	2176.78	2199.96
637	2666.53	2370.67	2177.06	2200.23
638	2666.72	2370.83	2177.35	2200.49
639	2666.89	2370.98	2177.63	2200.76
640	2667.03	2371.12	2177.93	2201.04
641	2667.15	2371.24	2178.24	2201.33
642	2667.27	2371.38	2178.58	2201.63
643	2667.46	2371.55	2178.93	2201.93
644	2667.80	2371.79	2179.30	2202.23
645	2668.34	2372.14	2179.69	2202.53
646	2669.15	2372.62	2180.08	2202.81
647	2670.28	2373.25	2180.48	2203.06
648	2671.75	2374.05	2180.88	2203.27
649	2673.57	2375.00	2181.27	2203.50
650	2675.74	2376.09	2181.63	2203.83
651	2678.27	2377.33	2182.00	2204.31
652	2681.15	2378.80	2182.52	2205.05
653	2684.36	2380.57	2183.31	2206.11
654	2687.90	2382.69	2184.45	2207.53
655	2691.73	2385.14	2185.95	2209.32
656	2695.84	2387.94	2187.83	2211.47
657	2700.17	2391.04	2190.06	2213.96
658	2704.69	2394.41	2192.61	2216.73
659	2709.36	2397.99	2195.42	2219.74

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
660	2384.67	2693.18	3029.84	3314.49	3446.88
661	2388.43	2697.80	3035.25	3320.24	3493.65
662	2392.17	2702.41	3040.65	3325.97	3499.42
663	2395.83	2706.95	3046.00	3331.69	3505.19
664	2399.33	2711.37	3051.28	3337.35	3510.95
665	2402.63	2715.62	3056.44	3342.96	3516.69
666	2405.67	2719.67	3061.45	3348.47	3522.41
667	2408.41	2723.48	3066.28	3353.88	3528.10
668	2410.84	2727.01	3070.90	3359.16	3533.74
669	2412.92	2730.25	3075.29	3364.29	3539.33
670	2414.66	2733.17	3079.42	3369.25	3544.85
671	2416.06	2735.77	3083.29	3374.02	3550.28
672	2417.14	2738.05	3086.86	3378.58	3555.61
673	2417.93	2740.02	3090.14	3382.92	3560.81
674	2418.50	2741.70	3093.12	3387.02	3565.88
675	2418.98	2743.16	3095.78	3390.87	3570.80
676	2419.44	2744.43	3098.14	3394.46	3575.57
677	2419.89	2745.55	3100.22	3397.81	3580.17
678	2420.33	2746.51	3102.02	3400.93	3584.63
679	2420.75	2747.33	3103.60	3403.84	3588.93
680	2421.14	2748.04	3104.99	3406.57	3593.11
681	2421.52	2748.66	3106.24	3409.17	3597.19
682	2421.89	2749.23	3107.40	3411.69	3601.20
683	2422.26	2749.78	3108.52	3414.17	3605.18
684	2422.62	2750.34	3109.66	3416.67	3609.17
685	2423.00	2750.94	3110.87	3419.23	3613.22
686	2423.39	2751.61	3112.21	3421.92	3617.36
687	2423.81	2752.46	3113.84	3424.87	3621.70
688	2424.27	2753.55	3115.85	3428.17	3626.27
689	2424.72	2754.80	3118.17	3431.73	3631.02

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
660	1983.511	2016.27	2199.56	2542.71	2923.71
661	1983.925	2016.87	2200.87	2545.24	2927.52
662	1984.343	2017.47	2202.19	2547.77	2931.34
663	1984.791	2018.11	2203.57	2550.37	2935.21
664	1985.303	2018.85	2205.96	2553.07	2939.17
665	1985.921	2019.71	2206.70	2555.91	2943.25
666	1986.702	2020.77	2208.55	2558.96	2947.50
667	1987.718	2022.08	2210.66	2562.23	2951.93
668	1989.048	2023.72	2213.09	2565.78	2956.58
669	1990.773	2025.74	2215.87	2569.62	2961.46
670	1992.992	2028.23	2219.05	2573.81	2966.58
671	1995.818	2031.27	2222.69	2578.35	2971.96
672	1999.415	2034.97	2226.82	2583.27	2977.59
673	2003.888	2039.41	2231.50	2588.58	2983.47
674	2009.280	2044.66	2236.77	2594.32	2989.60
675	2015.540	2050.75	2242.76	2600.53	2995.95
676	2022.624	2057.68	2249.50	2607.22	3002.51
677	2030.486	2065.43	2256.97	2614.37	3009.26
678	2039.052	2073.90	2265.08	2621.95	3016.19
679	2048.237	2083.01	2273.76	2629.88	3023.28
680	2057.941	2092.66	2282.91	2638.13	3030.51
681	2068.043	2102.70	2292.42	2646.61	3037.85
682	2078.404	2113.02	2302.17	2655.26	3045.26
683	2088.874	2123.44	2312.02	2663.97	3052.71
684	2099.292	2133.81	2321.83	2672.65	3060.14
685	2109.502	2143.97	2331.44	2681.21	3067.51
686	2119.363	2153.76	2340.72	2689.54	3074.77
687	2128.401	2162.73	2349.28	2697.40	3081.83
688	2136.417	2170.64	2356.89	2704.85	3088.62
689	2143.617	2177.69	2363.74	2711.41	3095.21

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
660	2714.12	2401.72	2198.40	2222.90
661	2718.92	2405.51	2201.46	2226.13
662	2723.71	2409.28	2204.50	2229.33
663	2728.42	2412.94	2207.41	2232.43
664	2733.03	2416.43	2210.10	2235.33
665	2737.47	2419.68	2212.51	2237.97
666	2741.70	2422.65	2214.59	2240.31
667	2745.70	2425.30	2216.31	2242.31
668	2749.42	2427.63	2217.67	2243.97
669	2752.85	2429.62	2218.68	2245.26
670	2755.96	2431.30	2219.38	2246.22
671	2758.76	2432.71	2219.84	2246.88
672	2761.22	2433.92	2220.21	2247.33
673	2763.37	2434.99	2220.56	2247.65
674	2765.19	2435.95	2220.96	2247.88
675	2766.71	2436.77	2221.36	2248.09
676	2767.94	2437.45	2221.76	2248.33
677	2768.91	2438.01	2222.16	2248.60
678	2769.66	2438.45	2222.55	2248.88
679	2770.23	2438.81	2222.93	2249.18
680	2770.66	2439.10	2223.31	2249.48
681	2771.01	2439.35	2223.68	2249.78
682	2771.30	2439.57	2224.05	2250.08
683	2771.57	2439.79	2224.41	2250.38
684	2771.86	2440.00	2224.77	2250.69
685	2772.18	2440.24	2225.14	2250.99
686	2772.58	2440.52	2225.52	2251.29
687	2773.18	2440.89	2225.90	2251.58
688	2774.11	2441.42	2226.30	2251.86
689	2775.30	2442.09	2226.70	2252.10

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
690	2425.20	2756.25	3120.82	3435.57	3635.93
691	2425.78	2757.94	3123.81	3439.68	3641.00
692	2426.62	2759.96	3127.14	3444.06	3646.23
693	2427.80	2762.35	3130.81	3448.69	3651.60
694	2429.39	2765.13	3134.83	3453.57	3657.08
695	2431.41	2768.31	3139.18	3458.67	3662.65
696	2433.91	2771.91	3143.85	3463.98	3668.31
697	2436.89	2775.91	3148.82	3469.47	3674.02
698	2440.37	2780.31	3154.09	3475.14	3679.78
699	2444.36	2785.11	3159.61	3480.94	3685.56
700	2448.85	2790.27	3165.38	3486.86	3691.34
701	2453.82	2795.78	3171.35	3492.88	3697.12
702	2459.28	2801.62	3177.50	3498.97	3702.88
703	2465.21	2807.76	3183.79	3505.12	3708.62
704	2471.51	2814.14	3190.18	3511.30	3714.35
705	2478.08	2820.70	3196.65	3517.51	3720.06
706	2484.79	2827.35	3203.16	3523.73	3725.76
707	2491.52	2834.01	3209.68	3529.95	3731.46
708	2498.14	2840.61	3216.16	3536.17	3737.17
709	2504.53	2847.05	3222.58	3542.36	3742.89
710	2510.58	2853.27	3228.91	3548.52	3748.63
711	2516.21	2859.22	3235.11	3554.63	3754.39
712	2521.38	2864.86	3241.15	3560.68	3760.16
713	2526.08	2870.18	3247.01	3566.65	3765.94
714	2530.32	2875.16	3252.67	3572.51	3771.72
715	2534.11	2879.80	3258.09	3578.26	3777.49
716	2537.43	2884.08	3263.26	3583.88	3783.24
717	2540.32	2888.00	3268.18	3589.34	3788.94
718	2542.79	2891.57	3272.83	3594.63	3794.59
719	2544.86	2894.80	3277.21	3599.76	3800.18

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
690	2149.927	2183.83	2369.77	2717.64	3101.57
691	2155.276	2189.04	2375.02	2723.36	3107.69
692	2159.590	2193.34	2379.59	2728.60	3113.52
693	2162.907	2196.81	2383.55	2733.39	3119.07
694	2165.385	2199.53	2386.93	2737.73	3124.31
695	2167.185	2201.63	2389.78	2741.64	3129.23
696	2168.440	2203.19	2392.13	2745.12	3133.82
697	2169.263	2204.29	2394.03	2748.20	3138.11
698	2169.783	2205.04	2395.53	2750.92	3142.08
699	2170.161	2205.54	2396.69	2753.29	3145.75
700	2170.515	2205.88	2397.56	2755.36	3149.14
701	2170.892	2206.14	2398.22	2757.17	3152.27
702	2171.295	2206.36	2398.74	2758.78	3155.17
703	2171.697	2206.58	2399.23	2760.26	3157.87
704	2172.098	2206.80	2399.69	2761.64	3160.42
705	2172.498	2207.03	2400.14	2762.95	3162.85
706	2172.898	2207.26	2400.60	2764.24	3165.23
707	2173.297	2207.49	2401.05	2765.51	3167.60
708	2173.697	2207.73	2401.50	2766.82	3170.02
709	2174.098	2207.95	2401.96	2768.18	3172.52
710	2174.500	2208.16	2402.44	2769.62	3175.17
711	2174.902	2208.38	2402.94	2771.18	3178.00
712	2175.292	2208.62	2403.54	2772.91	3181.03
713	2175.654	2208.92	2404.31	2774.85	3184.31
714	2176.011	2209.33	2405.31	2777.07	3187.83
715	2176.421	2209.91	2406.60	2779.57	3191.63
716	2177.022	2210.76	2408.22	2782.40	3195.70
717	2177.919	2211.95	2410.21	2785.56	3200.04
718	2179.203	2213.53	2412.59	2789.07	3204.66
719	2180.941	2215.57	2415.38	2792.93	3209.54

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
690	2776.80	2442.90	2227.10	2252.31
691	2778.64	2443.86	2227.49	2252.55
692	2780.84	2444.96	2227.85	2252.88
693	2783.42	2446.22	2228.23	2253.40
694	2786.39	2447.77	2228.82	2254.22
695	2789.76	2449.71	2229.77	2255.45
696	2793.55	2452.11	2231.20	2257.18
697	2797.74	2455.01	2233.21	2259.45
698	2802.32	2458.48	2235.88	2262.33
699	2807.29	2462.56	2239.31	2265.86
700	2812.62	2467.28	2243.55	2270.08
701	2818.28	2472.59	2248.56	2274.97
702	2824.23	2478.43	2254.26	2280.47
703	2830.42	2484.68	2260.50	2286.51
704	2836.79	2491.25	2267.16	2292.98
705	2843.30	2498.05	2274.11	2299.76
706	2849.88	2504.96	2281.23	2306.70
707	2856.47	2511.90	2288.36	2313.65
708	2863.01	2518.74	2295.37	2320.49
709	2869.42	2525.38	2302.13	2327.06
710	2875.68	2531.74	2308.51	2333.25
711	2881.71	2537.73	2314.41	2338.95
712	2887.49	2543.26	2319.71	2344.08
713	2892.97	2548.25	2324.30	2348.60
714	2898.13	2552.66	2328.14	2352.49
715	2902.94	2556.48	2331.24	2355.75
716	2907.41	2559.77	2333.69	2358.43
717	2911.52	2562.57	2335.58	2360.59
718	2915.28	2564.94	2336.98	2362.29
719	2918.70	2566.92	2337.98	2363.57

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
720	2546.57	2897.70	3281.33	3604.70	3805.69
721	2547.97	2900.30	3285.19	3609.47	3811.12
722	2549.09	2902.63	3288.81	3614.06	3816.46
723	2549.98	2904.70	3292.20	3618.49	3821.72
724	2550.70	2906.58	3295.39	3622.76	3826.88
725	2551.31	2908.30	3298.41	3626.89	3831.97
726	2551.84	2909.91	3301.29	3630.92	3837.00
727	2552.34	2911.46	3304.09	3634.88	3841.99
728	2552.84	2912.97	3306.83	3638.79	3846.95
729	2553.33	2914.48	3309.58	3642.71	3851.91
730	2553.84	2916.03	3312.37	3646.66	3856.89
731	2554.37	2917.64	3315.26	3650.70	3861.93
732	2554.98	2919.37	3318.29	3654.84	3867.02
733	2555.72	2921.27	3321.50	3659.13	3872.20
734	2556.64	2923.39	3324.93	3663.58	3877.46
735	2557.81	2925.76	3328.59	3668.20	3882.82
736	2559.29	2928.44	3332.52	3673.02	3888.28
737	2561.13	2931.46	3336.74	3678.03	3893.82
738	2563.38	2934.84	3341.24	3683.24	3899.43
739	2566.09	2938.62	3346.05	3688.63	3905.12
740	2569.32	2942.82	3351.17	3694.21	3910.86
741	2573.10	2947.45	3356.59	3699.96	3916.63
742	2577.47	2952.53	3362.30	3705.86	3922.41
743	2582.51	2958.08	3368.30	3711.89	3928.19
744	2588.33	2964.16	3374.56	3718.02	3933.93
745	2595.00	2970.79	3381.06	3724.24	3939.64
746	2602.52	2977.95	3387.78	3730.52	3945.29
747	2610.80	2985.60	3736.86	3736.71	3950.86
748	2619.74	2993.68	3401.82	3743.24	3956.37
749	2629.26	3002.14	3409.11	3749.66	3961.80

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
720	2183.198	2218.09	2418.60	2797.13	3214.68
721	2186.033	2221.14	2422.24	2801.68	3220.06
722	2189.518	2224.75	2426.30	2806.55	3225.66
723	2193.658	2228.91	2430.77	2811.71	3231.45
724	2198.397	2233.58	2435.61	2817.15	3237.40
725	2203.649	2238.70	2440.79	2822.82	3243.49
726	2209.298	2244.18	2446.26	2828.68	3249.68
727	2215.204	2249.91	2451.94	2834.69	3255.94
728	2221.242	2255.78	2457.73	2840.77	3262.23
729	2227.277	2261.64	2463.53	2846.86	3268.52
730	2233.176	2267.37	2469.20	2852.86	3274.78
731	2238.807	2272.83	2474.65	2858.72	3280.97
732	2244.024	2277.92	2479.81	2864.37	3287.05
733	2248.703	2282.54	2484.61	2869.78	3292.98
734	2252.743	2286.61	2489.02	2874.90	3298.74
735	2256.089	2290.10	2492.99	2879.70	3304.30
736	2258.762	2293.01	2496.52	2884.16	3309.61
737	2260.826	2295.35	2499.58	2888.24	3314.66
738	2262.345	2297.18	2502.18	2891.93	3319.43
739	2263.388	2298.52	2504.32	2895.23	3323.88
740	2264.049	2299.43	2506.03	2898.14	3328.01
741	2264.460	2300.02	2507.32	2900.65	3331.81
742	2264.814	2300.39	2508.25	2902.78	3335.26
743	2265.195	2300.65	2508.89	2904.56	3338.36
744	2265.597	2300.86	2509.38	2906.07	3341.11
745	2265.997	2301.09	2509.83	2907.36	3343.50
746	2266.393	2301.36	2510.29	2908.47	3345.56
747	2266.782	2301.65	2510.72	2909.38	3347.30
748	2267.162	2301.95	2511.12	2910.14	3348.77
749	2267.532	2302.25	2511.50	2910.75	3350.02

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
720	2921.79	2568.58	2338.66	2364.50
721	2924.58	2569.98	2339.13	2365.17
722	2927.09	2571.21	2339.50	2365.64
723	2929.35	2572.33	2339.85	2366.00
724	2931.40	2573.37	2340.22	2366.28
725	2933.27	2574.34	2340.60	2366.52
726	2935.01	2575.27	2341.01	2366.74
727	2936.66	2576.15	2341.41	2366.96
728	2938.25	2577.01	2341.81	2367.18
729	2939.85	2577.86	2342.21	2367.39
730	2941.50	2578.75	2342.62	2367.61
731	2943.24	2579.67	2343.02	2367.83
732	2945.13	2580.65	2343.40	2368.07
733	2947.20	2581.70	2343.77	2368.36
734	2949.50	2582.83	2344.12	2368.73
735	2952.07	2584.09	2344.50	2369.24
736	2954.94	2585.56	2345.02	2369.97
737	2958.14	2587.32	2345.80	2371.02
738	2961.72	2589.48	2346.98	2372.49
739	2965.69	2592.10	2348.66	2374.46
740	2970.07	2595.27	2350.97	2377.01
741	2974.88	2599.08	2354.96	2380.26
742	2980.13	2603.66	2358.12	2384.33
743	2985.83	2609.04	2363.23	2389.30
744	2991.96	2615.20	2369.35	2395.22
745	2998.53	2622.09	2376.42	2402.12
746	3005.51	2629.66	2384.39	2409.95
747	3012.90	2637.88	2393.18	2418.63
748	3020.68	2646.70	2402.70	2428.06
749	3028.82	2656.03	2412.86	2438.14

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
750	2639.26	3010.92	3416.56	3756.12	3967.18
751	2649.60	3019.95	3424.12	3762.60	3972.50
752	2660.15	3029.12	3431.76	3769.11	3977.79
753	2670.76	3038.33	3439.42	3775.62	3983.08
754	2681.27	3047.47	3447.05	3782.12	3988.38
755	2691.53	3056.43	3454.58	3788.59	3993.72
756	2701.41	3065.14	3461.99	3795.04	3999.11
757	2710.81	3073.52	3469.24	3801.45	4004.56
758	2719.62	3081.52	3476.32	3807.82	4010.08
759	2727.79	3089.10	3483.21	3814.16	4015.67
760	2735.24	3096.22	3489.92	3820.44	4021.32
761	2741.90	3102.84	3496.42	3826.65	4027.02
762	2747.78	3108.95	3502.69	3832.79	4032.77
763	2752.95	3114.59	3508.74	3838.84	4038.54
764	2757.51	3119.81	3514.54	3844.78	4044.32
765	2761.55	3124.64	3520.09	3850.60	4050.10
766	2765.11	3129.10	3525.39	3856.28	4055.86
767	2768.30	3133.27	3530.49	3861.85	4061.60
768	2771.11	3137.13	3535.36	3867.28	4067.29
769	2773.58	3140.70	3540.01	3872.58	4072.95
770	2775.77	3144.03	3544.48	3877.76	4078.55
771	2777.72	3147.15	3548.77	3882.82	4084.12
772	2779.48	3150.10	3552.93	3887.80	4089.64
773	2781.12	3152.93	3556.98	3892.70	4095.13
774	2782.67	3155.68	3560.97	3897.56	4100.60
775	2784.18	3158.39	3564.94	3902.40	4106.07
776	2785.72	3161.12	3568.91	3907.25	4111.53
777	2787.31	3163.91	3572.93	3912.13	4117.02
778	2789.02	3166.81	3577.05	3917.08	4122.53
779	2790.89	3169.86	3581.29	3922.11	4128.08

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
750	2267.892	2302.55	2511.86	2911.27	3351.09
751	2268.243	2302.86	2512.20	2911.71	3352.03
752	2268.589	2303.16	2512.54	2912.11	3352.91
753	2268.934	2303.46	2512.87	2912.50	3353.78
754	2269.281	2303.76	2513.21	2912.91	3354.67
755	2269.634	2304.06	2513.56	2913.37	3355.65
756	2269.997	2304.36	2513.92	2913.90	3356.76
757	2270.369	2304.67	2514.30	2914.55	3358.05
758	2270.751	2304.96	2514.71	2915.33	3359.57
759	2271.141	2305.25	2515.15	2916.28	3361.36
760	2271.537	2305.52	2515.60	2917.40	3363.44
761	2271.937	2305.75	2516.06	2918.69	3365.84
762	2272.339	2305.96	2516.54	2920.18	3368.56
763	2272.729	2306.20	2517.14	2921.91	3371.60
764	2273.085	2306.53	2517.97	2923.93	3374.95
765	2273.457	2307.01	2519.10	2926.27	3378.59
766	2273.944	2307.71	2520.55	2928.93	3382.52
767	2274.624	2308.65	2522.27	2931.86	3386.67
768	2275.585	2309.90	2524.33	2935.08	3391.06
769	2276.864	2311.49	2526.70	2938.58	3395.68
770	2278.461	2313.39	2529.37	2942.34	3400.48
771	2280.362	2315.58	2532.30	2946.31	3405.46
772	2282.535	2318.03	2535.45	2950.46	3410.56
773	2284.925	2320.67	2538.77	2954.75	3415.76
774	2287.463	2323.46	2542.19	2959.13	3421.02
775	2290.063	2326.29	2545.67	2963.54	3426.31
776	2292.636	2329.11	2549.12	2967.94	3431.58
777	2295.094	2331.82	2552.49	2972.27	3436.81
778	2297.358	2334.35	2555.71	2976.48	3441.95
779	2299.366	2336.64	2558.73	2980.52	3446.98

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
750	3037.29	2665.81	2423.53	2448.75
751	3046.02	2675.92	2434.59	2459.75
752	3054.90	2686.24	2445.87	2470.98
753	3063.83	2696.60	2457.20	2482.27
754	3072.67	2706.87	2468.43	2493.44
755	3081.34	2716.90	2479.40	2504.35
756	3089.73	2726.57	2489.95	2514.83
757	3097.79	2735.79	2499.97	2524.77
758	3105.49	2744.49	2509.36	2534.07
759	3112.82	2752.62	2518.03	2542.62
760	3119.77	2760.14	2525.92	2550.38
761	3126.33	2767.01	2532.98	2557.26
762	3132.49	2773.22	2539.17	2563.25
763	3138.27	2778.75	2544.46	2568.38
764	3143.65	2783.57	2548.83	2572.71
765	3148.66	2787.71	2552.34	2576.32
766	3153.31	2791.27	2555.11	2579.29
767	3157.66	2794.40	2557.38	2581.81
768	3161.71	2797.12	2559.18	2583.88
769	3165.47	2799.49	2560.59	2585.58
770	3168.99	2801.58	2561.70	2586.98
771	3172.30	2803.45	2562.58	2588.14
772	3175.44	2805.16	2563.31	2589.13
773	3178.46	2806.75	2563.93	2589.99
774	3181.40	2808.27	2564.49	2590.78
775	3184.31	2809.77	2565.03	2591.54
776	3187.23	2811.28	2565.58	2592.32
777	3190.21	2812.83	2566.17	2593.15
778	3193.30	2814.49	2566.85	2594.08
779	3196.54	2816.29	2567.67	2595.16

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
780	2792.99	3173.11	3585.69	3927.24	4133.67
781	2795.36	3176.60	3590.27	3932.49	4139.30
782	2798.05	3180.36	3595.07	3937.88	4144.99
783	2801.13	3184.44	3600.10	3943.41	4150.71
784	2804.64	3188.86	3605.38	3949.08	4156.47
785	2808.64	3193.66	3610.91	3954.89	4162.25
786	2813.20	3198.88	3616.71	3960.83	4168.03
787	2818.40	3204.54	3622.77	3966.88	4173.80
788	2824.39	3210.73	3629.07	3973.04	4179.54
789	2831.26	3217.48	3635.63	3979.27	4185.23
790	2839.03	3224.80	3642.42	3985.57	4190.86
791	2847.63	3232.66	3649.43	3991.93	4196.40
792	2857.03	3241.04	3656.69	3998.34	4201.85
793	2867.20	3249.95	3664.19	4004.82	4207.20
794	2878.08	3259.35	3671.96	4011.35	4212.45
795	2889.59	3269.22	3679.98	4017.95	4217.60
796	2901.62	3279.47	3688.24	4024.62	4222.67
797	2914.01	3290.01	3696.69	4031.35	4227.69
798	2926.62	3300.72	3705.24	4038.11	4232.67
799	2939.25	3311.45	3713.80	4044.87	4237.65
800	2951.76	3322.09	3722.31	4051.61	4242.64
801	2963.98	3332.50	3730.66	4058.31	4247.68
802	2975.75	3342.56	3738.80	4064.95	4252.80
803	2986.95	3352.19	3746.70	4071.51	4258.00
804	2997.48	3361.34	3754.33	4078.01	4263.30
805	3007.27	3369.99	3761.70	4084.46	4268.70
806	3016.28	3378.12	3768.84	4090.84	4274.19
807	3024.48	3385.71	3775.75	4097.17	4279.78
808	3031.82	3392.77	3782.42	4103.45	4285.44
809	3038.29	3399.26	3788.87	4109.64	4291.18

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
780	2301.076	2338.65	2561.50	2984.36	3451.85
781	2302.466	2340.34	2563.98	2987.95	3456.53
782	2303.528	2341.70	2566.14	2991.27	3461.00
783	2304.283	2342.73	2567.96	2994.28	3465.22
784	2304.791	2343.46	2569.44	2996.98	3469.18
785	2305.167	2343.95	2570.59	2999.34	3472.84
786	2305.523	2344.28	2571.42	3001.36	3476.20
787	2305.915	2344.52	2572.01	3003.08	3479.22
788	2306.317	2344.73	2572.48	3004.54	3481.89
789	2306.716	2344.97	2572.94	3005.78	3484.20
790	2307.110	2345.25	2573.39	3006.83	3486.16
791	2307.495	2345.55	2573.81	3007.67	3487.77
792	2307.867	2345.85	2574.19	3008.31	3489.06
793	2308.223	2346.15	2574.54	3008.79	3490.06
794	2308.560	2346.45	2574.86	3009.13	3490.84
795	2308.877	2346.74	2575.16	3009.37	3491.45
796	2309.175	2347.02	2575.44	3009.54	3491.93
797	2309.459	2347.29	2575.71	3009.67	3492.34
798	2309.734	2347.55	2575.97	3009.78	3492.72
799	2310.009	2347.81	2576.23	3010.00	3493.09
800	2310.288	2348.07	2576.49	3010.15	3493.48
801	2310.578	2348.35	2576.76	3011.00	3493.92
802	2310.886	2348.63	2577.05	3010.35	3494.47
803	2311.214	2348.93	2577.36	3010.64	3495.15
804	2311.560	2349.23	2577.70	3011.05	3496.04
805	2311.925	2349.53	2578.07	3011.60	3497.18
806	2312.304	2349.83	2578.47	3012.34	3498.63
807	2312.693	2350.12	2578.90	3013.28	3500.40
808	2313.090	2350.38	2579.35	3014.42	3502.53
809	2313.491	2350.60	2579.81	3015.76	3505.01

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
780	3199.97	2818.29	2568.68	2596.47
781	3203.65	2820.56	2569.98	2598.06
782	3207.60	2823.16	2571.64	2600.00
783	3211.87	2826.17	2573.77	2602.38
784	3216.48	2829.67	2576.47	2605.30
785	3221.46	2833.77	2579.92	2608.85
786	3226.84	2838.58	2584.28	2613.17
787	3232.64	2844.14	2589.63	2618.35
788	3238.86	2850.45	2595.94	2624.47
789	3245.51	2857.50	2603.22	2631.58
790	3252.63	2865.28	2611.45	2639.69
791	3260.20	2873.79	2620.60	2648.74
792	3268.27	2883.02	2630.63	2658.69
793	3276.87	2892.97	2641.50	2669.50
794	3286.01	2903.60	2653.13	2681.09
795	3295.69	2914.86	2665.44	2693.36
796	3305.85	2926.67	2678.30	2706.20
797	3316.37	2938.87	2691.56	2719.44
798	3327.11	2951.30	2705.04	2732.90
799	3337.88	2963.76	2718.55	2746.38
800	3348.53	2976.09	2731.93	2759.75
801	3358.88	2988.11	2745.00	2772.80
802	3368.79	2999.64	2757.59	2785.36
803	3378.20	3010.59	2769.56	2797.29
804	3387.06	3020.88	2780.82	2808.49
805	3395.39	3030.47	2791.27	2818.88
806	3403.21	3039.34	2800.87	2828.39
807	3410.56	3047.49	2809.58	2836.98
808	3417.45	3054.93	2817.36	2844.63
809	3423.91	3061.64	2824.20	2851.28
				1718.54
				5583.56

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
810	3043.92	3405.21	3795.07	4115.76	4296.91
811	3048.84	3410.68	3801.02	4121.77	4302.69
812	3053.18	3415.74	3806.72	4127.66	4308.47
813	3057.01	3420.41	3812.16	4133.42	4314.25
814	3060.39	3424.73	3817.37	4139.05	4320.00
815	3063.37	3428.73	3822.34	4144.54	4325.71
816	3066.02	3432.45	3827.11	4149.91	4331.39
817	3068.38	3435.93	3831.69	4155.16	4337.02
818	3070.51	3439.20	3836.11	4160.31	4342.62
819	3072.45	3442.32	3840.40	4165.38	4348.18
820	3074.27	3445.32	3844.60	4170.38	4353.71
821	3076.02	3448.25	3848.74	4175.34	4359.23
822	3077.74	3451.17	3852.87	4180.30	4364.75
823	3079.50	3454.10	3857.02	4185.26	4370.27
824	3081.34	3457.12	3861.23	4190.28	4375.81
825	3083.31	3460.27	3865.55	4195.36	4381.38
826	3085.48	3463.58	3870.00	4200.52	4386.98
827	3087.89	3467.10	3874.61	4205.80	4392.62
828	3090.59	3470.86	3879.41	4211.19	4398.31
829	3093.63	3474.92	3884.42	4216.70	4404.03
830	3097.07	3479.29	3889.66	4222.35	4409.78
831	3100.97	3484.00	3895.14	4228.13	4415.56
832	3105.36	3489.10	3900.86	4234.03	4421.34
833	3110.33	3494.60	3906.83	4240.05	4427.12
834	3115.98	3500.57	3913.04	4246.16	4432.87
835	3122.43	3507.95	3919.47	4252.36	4438.59
836	3129.70	3514.06	3926.13	4258.63	4444.26
837	3137.77	3521.57	3933.00	4264.95	4449.85
838	3148.57	3529.56	3940.08	4271.32	4455.38
839	3158.06	3538.00	3947.36	4277.74	4460.81

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
810	2313.893	2350.82	2580.32	3017.32	3507.83
811	2314.267	2351.09	2581.00	3019.16	3510.99
812	2314.622	2351.47	2581.95	3021.31	3514.46
813	2315.022	2352.03	2583.21	3023.78	3518.23
814	2315.596	2352.84	2584.79	3026.57	3522.26
815	2316.418	2353.95	2586.89	3029.66	3526.55
816	2317.526	2355.36	2588.89	3033.02	3531.05
817	2318.927	2357.06	2591.38	3036.62	3535.74
818	2320.596	2359.03	2594.12	3040.43	3540.58
819	2322.502	2361.23	2597.05	3044.40	3545.56
820	2324.591	2363.60	2600.13	3048.50	3550.62
821	2326.794	2366.07	2603.31	3052.67	3555.74
822	2329.034	2368.58	2606.51	3056.87	3560.87
823	2331.229	2371.05	2609.67	3061.03	3565.98
824	2333.286	2373.39	2612.73	3065.11	3571.03
825	2335.149	2375.54	2615.63	3069.06	3575.98
826	2336.769	2377.46	2618.32	3072.83	3580.80
827	2338.117	2379.12	2620.76	3076.39	3585.46
828	2339.172	2380.47	2622.91	3079.70	3589.92
829	2339.951	2381.52	2624.76	3082.74	3594.17
830	2340.493	2382.36	2626.30	3085.48	3598.17
831	2340.884	2382.83	2627.52	3087.92	3601.90
832	2341.238	2383.20	2628.43	3090.04	3605.34
833	2341.614	2383.46	2629.10	3091.86	3608.47
834	2342.017	2383.68	2629.60	3093.41	3611.29
835	2342.417	2383.90	2630.06	3094.75	3613.77
836	2342.815	2384.16	2630.51	3095.91	3615.93
837	2343.206	2384.45	2630.95	3096.88	3617.76
838	2343.588	2384.74	2631.36	3097.67	3619.29
839	2343.958	2385.04	2631.74	3098.29	3620.54

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
810	3429.95	3067.63	2830.10	2856.98
811	3435.57	3072.88	2835.04	2861.80
812	3440.80	3077.42	2839.04	2865.82
813	3445.65	3081.30	2842.22	2869.14
814	3450.16	3084.64	2844.74	2871.89
815	3454.35	3087.55	2846.74	2874.16
816	3458.26	3090.09	2848.34	2876.05
817	3461.92	3092.35	2849.63	2877.63
818	3465.39	3094.39	2850.68	2878.97
819	3468.69	3096.25	2851.56	2880.12
820	3471.89	3098.01	2852.33	2881.16
821	3475.01	3099.69	2853.04	2882.13
822	3478.11	3101.36	2853.73	2883.07
823	3481.24	3103.05	2854.45	2884.04
824	3484.45	3104.83	2855.24	2885.10
825	3487.79	3106.72	2856.14	2886.29
826	3491.29	3108.79	2857.23	2887.66
827	3495.00	3111.10	2858.58	2889.30
828	3498.95	3113.71	2860.24	2891.25
829	3503.19	3116.68	2862.32	2893.59
830	3507.75	3120.09	2864.93	2896.42
831	3512.64	3124.05	2868.20	2899.82
832	3517.91	3128.65	2872.29	2903.91
833	3523.56	3133.95	2877.29	2908.79
834	3529.61	3139.97	2883.22	2914.52
835	3536.06	3146.66	2890.04	2921.15
836	3542.92	3154.04	2897.76	2928.72
837	3550.19	3162.08	2906.32	2937.16
838	3557.89	3170.77	2915.69	2946.44
839	3566.01	3180.07	2925.80	2956.48

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
840	3166.16	3546.85	3954.84	4284.21	4466.17
841	3176.79	3556.08	3962.51	4290.72	4471.46
842	3187.84	3565.61	3970.34	4297.27	4476.68
843	3199.17	3575.34	3978.29	4303.85	4481.86
844	3210.64	3585.17	3986.29	4310.45	4487.02
845	3222.06	3594.97	3994.28	4317.05	4492.18
846	3233.28	3604.62	4002.18	4323.62	4497.38
847	3244.15	3614.02	4009.94	4330.15	4502.63
848	3254.53	3623.07	4017.52	4336.64	4507.95
849	3264.32	3631.71	4024.90	4343.08	4513.35
850	3273.43	3639.90	4032.06	4349.47	4518.84
851	3281.78	3647.60	4039.01	4355.81	4524.40
852	3289.33	3654.78	4045.74	4362.10	4530.05
853	3295.99	3661.40	4052.24	4368.32	4535.75
854	3302.11	3667.67	4058.58	4374.48	4541.49
855	3307.39	3673.38	4064.67	4380.55	4547.26
856	3311.97	3678.62	4070.48	4386.50	4553.04
857	3315.95	3683.40	4076.00	4392.30	4558.82
858	3319.38	3687.76	4081.24	4397.94	4564.57
859	3322.30	3691.72	4086.18	4403.42	4570.28
860	3324.78	3695.29	4090.83	4408.72	4575.93
861	3326.67	3698.36	4095.09	4413.76	4581.48
862	3328.11	3700.99	4098.98	4418.55	4586.92
863	3329.30	3703.39	4102.66	4423.18	4592.29
864	3330.30	3705.59	4106.16	4427.69	4597.59
865	3331.16	3707.64	4109.52	4432.09	4602.83
866	3331.94	3709.58	4112.78	4436.41	4608.02
867	3332.67	3711.47	4115.98	4440.69	4613.19
868	3333.38	3713.34	4119.16	4444.95	4618.36
869	3334.12	3715.25	4122.37	4449.24	4623.54

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
840	2344.316	2385.35	2632.10	3098.79	3621.57
841	2344.660	2385.65	2632.43	3099.17	3622.43
842	2344.991	2385.94	2632.74	3099.48	3623.16
843	2345.314	2386.24	2633.05	3099.75	3623.81
844	2345.633	2386.53	2633.35	3099.99	3624.42
845	2345.953	2386.82	2633.65	3100.25	3625.05
846	2346.279	2387.11	2633.96	3100.53	3625.73
847	2346.616	2387.41	2634.28	3100.87	3626.51
848	2346.967	2387.71	2634.63	3101.31	3627.45
849	2347.331	2388.01	2634.99	3101.86	3628.59
850	2347.709	2388.31	2635.39	3102.58	3630.00
851	2348.097	2388.60	2635.82	3103.47	3631.70
852	2348.492	2388.88	2636.27	3104.57	3633.75
853	2348.892	2389.11	2636.73	3105.87	3636.15
854	2349.294	2389.33	2637.20	3107.30	3638.77
855	2349.692	2389.56	2637.76	3108.97	3641.75
856	2350.049	2389.88	2638.58	3110.98	3645.09
857	2350.427	2390.38	2639.75	3113.36	3648.77
858	2350.975	2391.16	2641.29	3116.12	3652.77
859	2351.842	2392.31	2643.24	3119.25	3657.09
860	2353.118	2393.89	2645.61	3122.75	3661.71
861	2355.098	2396.16	2648.61	3126.77	3666.72
862	2357.863	2399.15	2652.20	3131.28	3672.07
863	2361.166	2402.60	2656.15	3136.06	3677.61
864	2364.977	2406.48	2660.41	3141.08	3683.30
865	2369.205	2410.71	2664.93	3146.28	3689.12
866	2373.738	2415.20	2669.64	3151.62	3695.02
867	2378.461	2419.85	2674.47	3157.05	3700.96
868	2383.269	2424.54	2679.32	3162.49	3706.92
869	2387.880	2429.15	2684.12	3167.89	3712.86

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
840	3574.56	3189.95	2936.59	2967.21
841	3583.50	3200.34	2947.96	2978.52
842	3592.78	3211.14	2959.78	2990.30
843	3602.31	3222.23	2971.90	3002.38
844	3611.94	3233.45	2984.16	3014.61
845	3621.55	3244.62	2996.37	3026.79
846	3630.97	3255.60	3008.37	3038.75
847	3640.11	3266.22	3019.99	3050.33
848	3648.86	3276.37	3031.09	3061.37
849	3657.19	3285.95	3041.54	3071.75
850	3665.07	3294.91	3051.24	3081.37
851	3672.50	3303.21	3060.13	3090.14
852	3679.50	3310.81	3068.12	3098.01
853	3686.06	3317.68	3075.18	3104.88
854	3692.34	3324.09	3081.63	3111.15
855	3698.19	3329.75	3087.09	3116.42
856	3703.59	3334.59	3091.50	3120.78
857	3708.55	3338.66	3094.91	3124.31
858	3713.09	3342.06	3097.50	3127.12
859	3717.24	3344.91	3099.43	3129.32
860	3721.00	3347.28	3100.85	3131.03
861	3724.26	3349.10	3101.68	3132.13
862	3727.08	3350.53	3102.17	3132.82
863	3729.67	3361.80	3102.55	3133.34
864	3732.05	3352.97	3102.91	3133.75
865	3734.28	3354.08	3103.26	3134.10
866	3736.40	3355.14	3103.62	3134.40
867	3738.46	3356.18	3103.98	3134.69
868	3740.51	3357.21	3104.35	3134.97
869	3742.58	3358.26	3104.71	3135.26

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
870	3334.92	3717.22	4125.66	4453.59	4628.74
871	3335.82	3719.31	4129.06	4458.01	4634.00
872	3336.87	3721.55	4132.60	4462.56	4639.31
873	3338.12	3724.00	4136.33	4467.23	4644.70
874	3339.60	3726.69	4140.27	4472.05	4650.15
875	3341.38	3729.65	4144.43	4477.03	4655.68
876	3343.49	3732.91	4148.84	4482.17	4661.27
877	3345.97	3736.50	4153.50	4487.47	4666.93
878	3348.87	3740.43	4158.43	4492.94	4672.83
879	3352.21	3744.72	4163.61	4498.56	4678.38
880	3356.03	3749.38	4169.05	4504.32	4684.15
881	3360.34	3754.42	4174.74	4510.20	4689.93
882	3365.18	3759.83	4180.65	4516.19	4695.71
883	3370.58	3765.63	4186.78	4522.28	4701.48
884	3376.58	3771.82	4193.09	4528.43	4707.22
885	3382.93	3778.24	4199.50	4534.62	4712.94
886	3389.82	3785.00	4206.06	4540.86	4718.63
887	3397.18	3792.06	4212.74	4547.13	4724.29
888	3404.87	3799.34	4219.51	4553.43	4729.92
889	3412.78	3806.75	4226.34	4559.74	4735.54
890	3420.79	3814.23	4233.20	4566.06	4741.14
891	3428.75	3821.68	4240.04	4572.38	4746.75
892	3436.54	3829.02	4246.84	4578.68	4752.37
893	3444.04	3836.16	4253.56	4584.97	4758.02
894	3451.09	3843.03	4260.16	4591.22	4763.70
895	3457.61	3849.56	4266.62	4597.42	4769.42
896	3463.51	3855.69	4272.90	4603.56	4775.18
897	3468.77	3861.39	4278.98	4609.63	4780.93
898	3473.43	3866.68	4284.82	4615.59	4786.71
899	3477.53	3871.55	4290.40	4621.42	4792.49

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
870	2392.332	2433.57	2688.78	3173.20	3718.73
871	2396.446	2437.71	2693.23	3178.35	3724.51
872	2400.125	2441.48	2697.41	3183.31	3730.17
873	2403.296	2444.82	2701.28	3188.03	3735.67
874	2405.954	2447.71	2704.79	3192.47	3740.98
875	2408.115	2450.15	2707.93	3196.62	3746.08
876	2409.805	2452.14	2710.68	3200.44	3750.94
877	2411.070	2453.71	2713.05	3203.93	3755.54
878	2411.958	2454.88	2715.02	3207.09	3759.88
879	2412.550	2455.72	2716.63	3209.90	3763.94
880	2412.953	2456.28	2717.90	3212.39	3767.71
881	2413.309	2456.67	2718.86	3214.55	3771.20
882	2413.677	2456.95	2719.57	3216.43	3774.40
883	2414.080	2457.18	2720.11	3218.07	3777.33
884	2414.482	2457.39	2720.59	3219.52	3779.99
885	2414.883	2457.61	2721.05	3220.89	3782.52
886	2415.281	2457.85	2721.50	3222.13	3784.82
887	2415.678	2458.12	2721.95	3223.27	3786.95
888	2416.073	2458.40	2722.41	3224.34	3788.94
889	2416.466	2458.68	2722.86	3225.35	3790.83
890	2416.858	2458.96	2723.30	3226.34	3792.69
891	2417.250	2459.25	2723.74	3227.33	3794.56
892	2417.644	2459.53	2724.19	3228.38	3796.51
893	2418.040	2459.80	2724.65	3229.49	3798.58
894	2418.439	2460.05	2725.10	3230.69	3800.82
895	2418.839	2460.27	2725.56	3232.02	3803.28
896	2419.241	2460.49	2726.04	3233.50	3805.99
897	2419.637	2460.72	2726.61	3235.19	3808.98
898	2419.997	2461.03	2727.40	3237.16	3812.27
899	2420.363	2461.49	2728.48	3239.46	3815.88

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
870	3744.73	3359.33	3105.07	1848.56
871	3747.00	3360.46	3105.42	1850.73
872	3749.44	3361.65	3105.78	1852.91
873	3752.07	3362.95	3106.18	1855.10
874	3754.95	3364.42	3106.70	1857.30
875	3758.10	3366.13	3107.43	1859.50
876	3761.55	3368.15	3108.46	1861.70
877	3765.33	3370.54	3109.89	1863.91
878	3769.45	3373.35	3111.79	1866.11
879	3773.92	3376.66	3114.26	1868.31
880	3778.77	3380.52	3117.42	1870.50
881	3783.97	3385.02	3121.38	1872.67
882	3789.54	3390.17	3126.18	1874.83
883	3795.46	3395.95	3131.79	1876.97
884	3801.69	3402.27	3138.13	1879.09
885	3808.09	3408.88	3144.85	1881.21
886	3814.75	3415.95	3152.15	1883.30
887	3821.65	3423.38	3159.94	1885.38
888	3828.73	3431.10	3168.09	1887.46
889	3835.92	3439.01	3176.49	1889.52
890	3843.16	3447.00	3184.98	1891.58
891	3850.37	3454.95	3193.43	1893.64
892	3857.50	3462.76	3201.69	1895.71
893	3864.47	3470.31	3209.63	1897.37
894	3871.22	3477.51	3217.11	1897.69
895	3877.70	3484.26	3224.01	1901.99
896	3883.88	3490.49	3230.22	1904.42
897	3889.71	3496.12	3235.65	1906.67
898	3895.16	3501.06	3240.18	1908.43
899	3900.22	3505.29	3243.79	1910.61

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
900	3481.08	3876.01	4295.70	4627.10	4798.25
901	3484.10	3880.04	4300.70	4632.61	4803.97
902	3486.61	3883.64	4305.37	4637.92	4809.63
903	3488.64	3886.84	4309.73	4643.03	4815.21
904	3490.23	3889.62	4313.75	4647.91	4820.69
905	3491.44	3892.03	4317.44	4652.56	4826.06
906	3492.30	3894.08	4320.80	4656.96	4831.30
907	3492.92	3895.82	4323.84	4661.11	4836.40
908	3493.41	3897.32	4326.57	4665.01	4841.36
909	3493.86	3898.65	4329.02	4668.68	4846.16
910	3494.32	3899.82	4331.20	4672.12	4850.83
911	3494.77	3900.88	4333.17	4675.38	4855.38
912	3495.21	3901.83	4334.96	4678.48	4859.82
913	3495.63	3902.70	4336.63	4681.47	4864.18
914	3496.05	3903.53	4338.22	4684.40	4868.50
915	3496.47	3904.36	4339.80	4687.31	4872.81
916	3496.89	3905.21	4341.43	4690.26	4877.14
917	3497.32	3906.11	4343.14	4693.29	4881.54
918	3497.76	3907.11	4345.01	4696.47	4886.03
919	3498.22	3908.22	4347.07	4699.60	4890.63
920	3498.67	3909.45	4349.38	4703.34	4895.35
921	3499.13	3910.83	4351.91	4707.09	4900.21
922	3499.65	3912.40	4354.73	4711.07	4905.21
923	3500.31	3914.20	4357.84	4715.28	4910.34
924	3501.21	3916.29	4361.24	4719.71	4915.60
925	3502.42	3918.70	4364.93	4724.35	4920.97
926	3503.95	3921.44	4368.91	4729.20	4926.44
927	3505.85	3924.51	4373.17	4734.24	4931.99
928	3508.11	3927.90	4377.68	4739.45	4937.61
929	3510.75	3931.62	4382.44	4744.82	4943.29

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
900	2420.855	2462.19	2729.94	3242.13	3819.82
901	2421.652	2463.27	2731.81	3245.19	3824.08
902	2422.892	2464.81	2734.15	3248.66	3828.67
903	2424.683	2466.90	2736.99	3252.55	3833.58
904	2427.145	2469.61	2740.36	3256.89	3838.81
905	2430.420	2473.04	2744.29	3261.65	3844.34
906	2434.645	2477.27	2748.81	3266.86	3850.15
907	2439.835	2482.33	2753.95	3272.50	3856.23
908	2445.911	2488.24	2759.77	3278.60	3862.53
909	2452.777	2494.95	2766.31	3285.16	3869.03
910	2460.340	2502.38	2773.49	3292.14	3875.71
911	2468.490	2510.43	2781.23	3299.47	3882.54
912	2477.102	2518.95	2789.39	3307.07	3889.49
913	2486.045	2527.81	2797.85	3314.87	3896.51
914	2496.173	2536.87	2806.48	3322.77	3903.59
915	2504.344	2545.96	2815.14	3330.70	3910.67
916	2513.407	2554.94	2823.71	3338.56	3917.73
917	2522.221	2563.68	2832.05	3346.28	3924.72
918	2530.622	2571.98	2840.02	3353.75	3931.61
919	2538.516	2579.76	2847.52	3360.93	3938.38
920	2545.799	2586.91	2854.44	3367.74	3944.99
921	2552.383	2593.32	2860.72	3374.14	3951.42
922	2558.207	2598.98	2866.33	3380.10	3957.66
923	2563.186	2603.86	2871.33	3385.64	3963.68
924	2567.293	2607.99	2875.77	3390.79	3969.46
925	2570.562	2611.41	2879.70	3395.56	3974.99
926	2573.125	2614.21	2883.15	3399.95	3980.26
927	2575.105	2616.48	2886.14	3403.98	3985.27
928	2576.608	2618.29	2888.73	3407.66	3990.02
929	2577.722	2619.70	2890.94	3411.02	3994.52

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
900	3904.86	3508.83	3246.54	3276.78
901	3909.07	3511.77	3248.59	3279.10
902	3912.87	3514.18	3250.04	3280.84
903	3916.25	3516.13	3251.00	3282.08
904	3919.23	3517.68	3251.59	3282.91
905	3921.82	3518.96	3251.98	3283.43
906	3924.06	3520.07	3252.33	3283.78
907	3925.95	3521.05	3252.72	3284.02
908	3927.54	3521.90	3253.12	3284.24
909	3928.84	3522.62	3253.52	3284.46
910	3929.91	3523.22	3253.92	3284.72
911	3930.79	3523.73	3254.31	3285.00
912	3931.53	3524.17	3254.70	3285.28
913	3932.16	3524.56	3255.09	3285.58
914	3932.75	3524.93	3255.48	3285.87
915	3933.32	3525.29	3255.86	3286.16
916	3933.92	3525.67	3256.25	3286.46
917	3934.59	3526.08	3256.64	3286.75
918	3935.39	3526.55	3257.03	3287.03
919	3936.36	3527.10	3257.43	3287.30
920	3937.52	3527.75	3257.82	3287.54
921	3938.92	3528.51	3258.22	3287.76
922	3940.60	3529.41	3258.63	3287.98
923	3942.56	3530.42	3259.00	3288.24
924	3944.84	3531.54	3259.36	3288.60
925	3947.43	3532.82	3259.74	3289.13
926	3950.36	3534.33	3260.30	3289.91
927	3953.62	3536.15	3261.13	3291.01
928	3957.21	3538.31	3262.32	3292.50
929	3961.11	3540.86	3263.91	3294.38
				1974.60
				6427.82

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
930	3935.63	4387.43	4750.32	4949.00	4840.95
931	3939.93	4392.62	4755.94	4954.75	4846.45
932	3944.47	4397.97	4761.66	4960.52	4851.89
933	3949.22	4403.47	4767.44	4966.29	4857.27
934	3954.13	4409.08	4773.29	4972.07	4862.61
935	3959.15	4414.75	4779.17	4977.86	4867.92
936	3964.24	4420.47	4785.07	4983.64	4873.21
937	3969.33	4426.19	4790.97	4989.42	4878.49
938	3974.36	4431.88	4796.86	4995.21	4883.80
939	3979.29	4437.50	4802.71	5000.99	4889.13
940	3984.06	4443.01	4808.50	5006.77	4894.51
941	3988.62	4448.38	4814.22	5012.53	4899.95
942	3992.92	4453.57	4819.85	5018.28	4905.44
943	3996.94	4458.56	4825.35	5024.00	4910.99
944	4000.64	4463.31	4830.71	5029.67	4916.60
945	4004.00	4467.79	4835.90	5035.28	4922.27
946	4007.00	4471.99	4840.90	5040.82	4927.97
947	4009.64	4475.89	4845.69	5046.26	4933.71
948	4011.91	4479.45	4850.25	5051.58	4939.45
949	4013.93	4482.79	4854.63	5056.81	4945.19
950	4015.62	4485.77	4858.73	5061.89	4950.91
951	4017.05	4488.39	4862.55	5066.79	4956.58
952	4018.26	4490.65	4866.06	5071.50	4962.18
953	4019.28	4492.55	4869.26	5076.00	4967.70
954	4020.09	4494.11	4872.15	5080.30	4973.13
955	4020.72	4495.37	4874.76	5084.39	4978.45
956	4021.20	4496.36	4877.12	5088.27	4983.66
957	4021.56	4497.18	4879.27	5091.97	4988.77
958	4021.83	4497.84	4881.24	5095.51	4993.79
959	4022.05	4498.40	4883.10	5098.94	4998.73

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
930	2578.532	2620.79	2892.83	3414.09	4523.15
931	2579.123	2621.63	2894.43	3416.91	4002.85
932	2579.571	2622.27	2895.81	3419.50	4006.72
933	2579.955	2622.79	2897.01	3421.91	4010.43
934	2580.318	2623.23	2898.06	3424.18	4014.01
935	2580.673	2623.63	2899.03	3426.36	4017.51
936	2581.028	2624.00	2899.96	3428.48	4020.95
937	2581.382	2624.37	2900.88	3430.60	4024.40
938	2581.737	2624.76	2901.84	3432.77	4027.88
939	2582.098	2625.19	2902.88	3435.03	4031.45
940	2582.480	2625.70	2904.06	3437.42	4035.14
941	2582.918	2626.33	2905.42	3440.00	4039.00
942	2583.502	2627.16	2907.02	3442.80	4043.05
943	2584.311	2628.25	2908.90	3445.87	4047.32
944	2585.442	2629.68	2911.13	3449.25	4051.83
945	2586.996	2631.54	2913.76	3452.97	4056.62
946	2589.083	2633.90	2916.85	3457.07	4061.68
947	2591.840	2636.88	2920.43	3461.57	4067.03
948	2595.459	2640.60	2924.58	3466.50	4072.67
949	2599.773	2644.91	2929.15	3471.74	4078.50
950	2605.137	2650.13	2934.41	3477.47	4084.62
951	2611.516	2656.34	2940.50	3483.74	4091.00
952	2618.881	2663.56	2947.50	3490.60	4097.63
953	2627.198	2671.78	2955.39	3498.03	4104.50
954	2636.420	2680.93	2964.10	3505.99	4111.60
955	2646.488	2690.94	2973.59	3514.45	4118.93
956	2657.328	2701.74	2983.77	3523.40	4126.49
957	2668.839	2713.23	2994.58	3532.78	4134.28
958	2680.905	2725.28	3005.90	3542.53	4142.27
959	2693.376	2737.74	3017.60	3552.56	4150.43

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END	RADIATION
930	3985.31	3543.78	3285.94	3298.67	1976.80
931	3989.79	3547.09	3268.42	3299.37	1979.00
932	3974.51	3550.75	3271.33	3302.47	1981.19
933	3979.44	3554.76	3274.66	3305.93	1983.38
934	3984.53	3559.05	3278.35	3309.68	1985.56
935	3989.73	3563.53	3282.29	3313.65	1987.73
936	3994.99	3568.12	3286.37	3317.73	1989.90
937	4000.25	3572.72	3290.45	3321.82	1992.08
938	4005.46	3577.22	3294.42	3325.81	1994.25
939	4010.57	3581.53	3298.14	3329.59	1996.43
940	4015.51	3585.57	3301.52	3333.09	1998.61
941	4020.25	3589.27	3304.46	3336.21	2000.81
942	4024.74	3592.59	3306.96	3338.93	2003.00
943	4028.95	3595.52	3308.98	3341.23	2005.21
944	4032.83	3598.04	3310.56	3343.09	2007.41
945	4036.38	3600.16	3311.70	3344.53	2009.62
946	4039.58	3601.92	3312.48	3345.56	2011.82
947	4042.40	3603.35	3312.96	3346.26	2014.01
948	4044.86	3604.55	3313.32	3346.70	2016.19
949	4047.06	3605.85	3313.68	3347.04	2018.36
950	4048.90	3606.61	3314.07	3347.27	2020.51
951	4050.37	3607.41	3314.47	3347.49	2022.63
952	4051.51	3608.05	3314.87	3347.73	2024.72
953	4052.33	3608.53	3315.27	3348.01	2026.79
954	4052.89	3608.88	3315.65	3348.31	2028.83
955	4053.24	3609.14	3316.02	3348.61	2030.84
956	4053.46	3609.32	3316.38	3348.91	2032.83
957	4053.59	3609.46	3316.72	3349.21	2034.81
958	4053.71	3609.59	3317.04	3349.51	2036.77
959	4053.82	3609.72	3317.35	3349.79	2038.74

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
960	3578.70	4022.24	4498.92	4884.89	5102.30
961	3578.98	4022.42	4499.42	4886.67	5105.64
962	3579.27	4022.62	4499.95	4888.48	5109.03
963	3579.57	4022.86	4500.56	4890.39	5112.51
964	3579.88	4023.17	4501.28	4892.44	5116.12
965	3580.22	4023.58	4502.17	4894.68	5119.90
966	3580.58	4024.12	4503.28	4897.15	5123.87
967	3580.98	4024.82	4504.65	4899.87	5128.04
968	3581.40	4025.71	4506.34	4902.88	5132.42
969	3581.86	4026.79	4508.35	4906.17	5136.99
970	3582.31	4028.06	4510.69	4909.75	5141.74
971	3582.60	4029.53	4513.38	4913.62	5146.67
972	3583.39	4031.24	4516.39	4917.75	5151.76
973	3584.23	4033.25	4519.71	4922.12	5156.99
974	3585.35	4035.58	4523.33	4926.71	5162.33
975	3586.78	4038.21	4527.22	4931.50	5167.77
976	3588.52	4041.14	4531.36	4936.46	5173.29
977	3590.56	4044.34	4535.72	4941.57	5178.87
978	3592.88	4047.78	4540.27	4946.81	5184.50
979	3595.46	4051.44	4544.99	4952.15	5190.16
980	3598.23	4055.28	4549.84	4957.57	5195.85
981	3601.17	4059.24	4554.79	4963.05	5201.56
982	3604.20	4063.28	4559.79	4968.56	5207.28
983	3607.27	4067.35	4564.82	4974.09	5213.01
984	3610.32	4071.41	4569.84	4979.61	5218.73
985	3613.21	4075.34	4574.76	4985.07	5224.44
986	3615.84	4079.05	4579.52	4990.43	5230.11
987	3618.24	4082.56	4584.12	4995.70	5235.75
988	3620.64	4086.07	4588.73	5000.97	5241.39
989	3622.77	4089.35	4593.15	5008.12	5246.99

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
960	2750.44	3029.51	3562.76	4158.69	4688.98
961	2763.18	3041.47	3572.99	4166.97	4695.70
962	2731.440	3053.30	3583.12	4175.18	4702.40
963	2743.728	3064.82	3593.02	4183.27	4709.06
964	2755.544	2799.85	3075.91	3602.61	4191.17
965	2766.758	2811.03	3086.44	3611.79	4198.85
966	2777.272	2821.50	3096.33	3620.53	4206.31
967	2787.007	2831.17	3105.51	3628.80	4213.54
968	2795.910	2839.99	3113.93	3636.57	4220.56
969	2803.942	2847.92	3121.57	3643.83	4227.36
970	2811.066	2854.90	3128.34	3650.54	4233.93
971	2817.273	2860.93	3134.28	3656.72	4240.27
972	2822.549	2866.07	3139.48	3662.40	4246.36
973	2826.889	2870.40	3144.07	3667.66	4252.21
974	2830.371	2874.00	3148.13	3672.52	4257.80
975	2833.138	2876.99	3151.72	3677.03	4263.16
976	2835.352	2879.48	3154.90	3681.21	4268.28
977	2837.128	2881.55	3157.73	3685.10	4273.18
978	2838.567	2883.29	3160.25	3688.73	4277.90
979	2839.744	2884.77	3162.53	3692.15	4282.44
980	2840.732	2886.05	3164.62	3695.39	4286.86
981	2841.592	2887.20	3166.56	3698.52	4291.17
982	2842.378	2888.26	3168.42	3701.56	4295.42
983	2843.137	2889.29	3170.24	3704.58	4299.65
984	2843.911	2890.34	3172.08	3707.61	4303.89
985	2844.801	2891.52	3174.06	3710.77	4308.23
986	2845.920	2892.94	3176.28	3714.13	4312.74
987	2847.283	2894.60	3178.73	3717.71	4317.40
988	2848.637	2896.26	3181.18	3721.27	4322.06
989	2850.304	2898.23	3183.91	3725.08	4326.91

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
960	4053.95	3609.85	3317.66	3350.08
961	4054.08	3609.99	3317.96	3350.36
962	4054.21	3610.12	3318.27	3350.64
963	4054.32	3610.24	3318.58	3350.93
964	4054.44	3610.38	3318.92	3351.23
965	4054.61	3610.53	3319.26	3351.53
966	4054.87	3610.74	3319.63	3351.83
967	4055.30	3611.03	3320.00	3352.13
968	4055.95	3611.43	3320.39	3352.42
969	4056.86	3611.96	3320.79	3352.70
970	4058.08	3612.83	3321.19	3352.93
971	4059.62	3613.46	3321.59	3353.15
972	4061.48	3614.44	3321.98	3353.39
973	4063.67	3615.53	3322.33	3353.72
974	4066.19	3616.76	3322.70	3354.19
975	4069.01	3618.19	3323.19	3354.88
976	4072.13	3619.87	3323.89	3355.85
977	4075.52	3621.82	3324.86	3357.10
978	4079.15	3624.05	3326.11	3358.64
979	4083.00	3626.52	3327.63	3360.45
980	4087.02	3629.21	3329.39	3362.49
981	4091.17	3632.06	3331.33	3364.70
982	4095.40	3635.02	3333.40	3367.03
983	4099.66	3638.02	3335.52	3369.41
984	4103.91	3641.00	3337.61	3371.76
985	4108.03	3643.81	3339.51	3373.93
986	4111.93	3646.35	3341.99	3375.81
987	4115.62	3648.64	3342.42	3377.43
988	4119.33	3650.95	3343.76	3379.05
989	4122.79	3652.98	3344.81	3380.39

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CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
990	3624.60	4092.36	4597.35	5011.13	5252.52
991	3626.12	4095.07	4601.32	5015.96	5257.99
992	3627.32	4097.48	4605.01	5020.61	5263.36
993	3628.23	4099.58	4608.41	5025.05	5268.61
994	3628.88	4101.36	4611.50	5029.24	5273.74
995	3629.34	4102.77	4614.09	5033.03	5278.62
996	3629.80	4103.89	4616.17	5036.38	5283.23
997	3630.23	4104.80	4617.90	5039.42	5287.63
998	3630.63	4105.52	4619.30	5042.17	5291.82
999	3630.99	4106.07	4620.42	5044.65	5295.80
1000	3631.33	4106.47	4621.30	5046.88	5299.57
1001	3631.64	4106.76	4621.99	5048.89	5303.15
1002	3631.93	4106.97	4622.54	5050.73	5306.56
1003	3632.21	4107.13	4623.01	5052.45	5309.85
1004	3632.48	4107.27	4623.43	5054.11	5313.07
1005	3632.74	4107.40	4623.84	5055.75	5316.26
1006	3633.01	4107.54	4624.26	5057.41	5319.49
1007	3633.29	4107.71	4624.75	5059.16	5322.81
1008	3633.59	4107.95	4625.33	5061.05	5326.27
1009	3633.91	4108.27	4626.07	5063.12	5329.90
1010	3634.25	4108.71	4627.02	5065.42	5333.73
1011	3634.63	4109.31	4628.23	5067.98	5337.78
1012	3635.04	4110.09	4629.75	5070.84	5342.05
1013	3635.48	4111.09	4631.61	5074.00	5346.53
1014	3635.93	4112.28	4633.83	5077.48	5351.22
1015	3636.40	4113.69	4636.42	5081.26	5356.10
1016	3636.96	4115.35	4639.36	5085.34	5361.16
1017	3637.76	4117.32	4642.65	5089.68	5366.37
1018	3638.88	4119.64	4646.26	5094.28	5371.71
1019	3640.35	4122.32	4650.19	5099.09	5377.16

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
990	2852.381	2900.59	3186.98	3729.17	4331.97
991	2854.979	2903.43	3190.46	3733.58	4337.25
992	2858.246	2906.85	3194.38	3738.34	4342.78
993	2862.351	2910.98	3198.83	3743.49	4348.56
994	2867.386	2915.90	3203.86	3749.06	4354.60
995	2873.847	2922.20	3210.03	3755.39	4361.00
996	2881.709	2929.95	3217.50	3762.55	4367.75
997	2890.482	2938.63	3225.80	3770.24	4374.74
998	2900.134	2948.22	3234.91	3778.45	4381.95
999	2910.618	2958.66	3244.77	3787.17	4389.40
1000	2921.874	2969.88	3255.34	3796.39	4397.10
1001	2933.816	2981.81	3266.54	3806.05	4405.04
1002	2946.331	2994.31	3278.28	3816.12	4413.22
1003	2959.274	3007.25	3290.42	3826.49	4421.59
1004	2972.472	3020.45	3302.80	3837.04	4430.07
1005	2985.732	3033.71	3315.23	3847.65	4438.58
1006	2998.879	3046.85	3327.56	3858.16	4447.03
1007	3011.721	3059.69	3339.61	3868.46	4455.35
1008	3024.091	3072.04	3351.21	3878.42	4463.47
1009	3035.845	3083.77	3362.24	3887.96	4471.35
1010	3046.871	3094.77	3372.60	3897.03	4478.97
1011	3057.087	3104.93	3382.22	3905.58	4486.34
1012	3066.429	3114.20	3391.04	3913.61	4493.47
1013	3074.850	3122.53	3399.02	3921.10	4500.36
1014	3082.313	3129.86	3406.12	3928.02	4507.02
1015	3088.789	3136.17	3412.30	3934.35	4513.42
1016	3094.269	3141.49	3417.63	3940.13	4519.57
1017	3098.716	3145.91	3422.29	3945.43	4525.45
1018	3102.204	3149.51	3426.36	3950.30	4531.04
1019	3104.888	3152.43	3429.89	3954.76	4536.36

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
990	4125.99	3654.74	3345.59	3381.44
991	4128.90	3656.24	3346.13	3382.20
992	4131.50	3657.51	3346.51	3382.73
993	4133.77	3658.64	3346.87	3383.09
994	4135.72	3659.64	3347.24	3383.34
995	4137.17	3660.43	3347.64	3383.56
996	4138.14	3660.98	3348.04	3383.83
997	4138.83	3661.40	3348.43	3384.12
998	4139.27	3661.70	3348.81	3384.42
999	4139.54	3661.91	3349.17	3384.72
1000	4139.70	3662.06	3349.52	3385.02
1001	4139.82	3662.19	3349.85	3385.32
1002	4139.94	3662.32	3350.16	3385.60
1003	4140.09	3662.46	3350.45	3385.88
1004	4140.26	3662.62	3350.74	3386.15
1005	4140.44	3662.77	3351.02	3386.42
1006	4140.61	3662.92	3351.31	3386.69
1007	4140.75	3663.06	3351.61	3386.97
1008	4140.86	3663.18	3351.92	3387.26
1009	4140.99	3663.32	3352.26	3387.56
1010	4141.17	3663.49	3352.61	3387.86
1011	4141.49	3663.72	3352.98	3388.16
1012	4142.02	3664.06	3353.36	3388.46
1013	4142.81	3664.53	3353.75	3388.74
1014	4143.92	3665.15	3354.15	3388.99
1015	4145.36	3665.93	3354.55	3389.21
1016	4147.16	3666.88	3354.95	3389.44
1017	4149.31	3667.96	3355.31	3389.75
1018	4151.82	3669.19	3355.68	3390.23
1019	4154.68	3670.65	3356.19	3390.95

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1020	3642.19	4125.33	4654.40	5104.10	5382.70
1021	3644.39	4128.68	4658.88	5109.28	5388.31
1022	3646.96	4132.33	4663.59	5114.62	5393.97
1023	3649.85	4136.26	4668.51	5120.08	5399.68
1024	3653.04	4140.43	4673.61	5125.65	5405.41
1025	3656.49	4144.81	4678.86	5131.30	5411.17
1026	3660.14	4149.34	4684.21	5137.02	5416.93
1027	3663.93	4153.98	4689.63	5142.77	5422.71
1028	3667.79	4158.68	4695.09	5148.54	5428.48
1029	3671.64	4163.37	4700.55	5154.31	5434.25
1030	3675.43	4168.00	4705.97	5160.05	5440.03
1031	3679.07	4172.53	4711.32	5165.76	5445.79
1032	3682.51	4176.90	4716.56	5171.41	5451.55
1033	3685.70	4181.07	4721.66	5176.98	5457.28
1034	3688.59	4185.00	4726.58	5182.44	5462.99
1035	3691.17	4188.67	4731.30	5187.79	5468.65
1036	3693.41	4192.04	4735.80	5192.98	5474.27
1037	3695.30	4195.10	4740.05	5198.02	5479.82
1038	3697.03	4198.01	4744.18	5202.98	5485.33
1039	3698.42	4200.61	4748.03	5207.74	5490.76
1040	3699.48	4202.88	4751.80	5212.30	5496.08
1041	3700.27	4204.83	4754.87	5216.63	5501.29
1042	3700.84	4206.51	4757.84	5220.72	5506.35
1043	3701.32	4207.96	4760.50	5224.57	5511.27
1044	3701.77	4209.24	4762.86	5228.16	5516.04
1045	3702.23	4210.36	4764.94	5231.52	5520.65
1046	3702.67	4211.33	4766.77	5234.65	5526.11
1047	3703.08	4212.17	4768.37	5237.59	5529.44
1048	3703.48	4212.90	4769.80	5240.36	5533.84
1049	3703.87	4213.56	4771.10	5243.01	5537.76

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1020	3106.952	3154.77	3432.95	3958.84	4541.42
1021	3108.524	3156.65	3435.60	3962.58	4546.21
1022	3109.710	3158.14	3437.88	3966.00	4550.76
1023	3110.600	3159.32	3439.86	3989.16	4555.10
1024	3111.279	3160.25	3441.58	3972.08	4559.25
1025	3111.817	3161.02	3443.11	3974.82	4563.26
1026	3112.267	3161.67	3444.50	3977.42	4567.12
1027	3112.676	3162.25	3445.79	3979.93	4570.91
1028	3113.072	3162.80	3447.03	3982.39	4574.66
1029	3113.468	3163.35	3448.28	3984.85	4578.41
1030	3113.878	3163.94	3449.57	3987.36	4582.21
1031	3114.332	3164.59	3450.98	3989.96	4586.09
1032	3114.874	3165.37	3452.49	3992.71	4590.09
1033	3115.555	3166.31	3454.22	3995.63	4594.24
1034	3116.442	3167.48	3456.20	3998.79	4598.58
1035	3117.614	3168.96	3458.47	4002.20	4603.12
1036	3119.151	3170.80	3461.08	4005.91	4607.89
1037	3121.143	3173.07	3464.09	4009.94	4612.91
1038	3123.374	3175.57	3467.28	4014.13	4618.04
1039	3126.220	3178.63	3470.93	4018.68	4623.42
1040	3129.844	3182.36	3475.08	4023.61	4629.06
1041	3134.346	3186.82	3479.77	4028.94	4634.95
1042	3139.759	3192.09	3485.06	4034.69	4641.08
1043	3146.029	3198.18	3491.06	4040.90	4647.43
1044	3153.111	3205.12	3497.79	4047.59	4653.99
1045	3160.948	3212.84	3505.24	4054.74	4660.74
1046	3169.465	3221.26	3513.31	4062.28	4667.66
1047	3178.572	3230.29	3521.92	4070.17	4674.73
1048	3188.162	3239.82	3530.97	4078.35	4681.93
1049	3198.112	3249.71	3540.34	4086.74	4689.22

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1020	4157.89	3672.42	3356.97	3392.00
1021	4161.42	3674.53	3358.10	3393.42
1022	4165.26	3676.99	3359.61	3395.22
1023	4169.38	3679.80	3361.51	3397.39
1024	4173.74	3682.94	3363.79	3399.92
1025	4178.30	3686.37	3366.40	3402.75
1026	4183.02	3690.02	3369.30	3405.83
1027	4187.84	3693.85	3372.41	3409.10
1028	4192.71	3697.76	3375.62	3412.46
1029	4197.58	3701.67	3378.84	3415.81
1030	4202.39	3705.49	3381.93	3419.07
1031	4207.10	3709.14	3384.82	3422.14
1032	4211.66	3712.55	3387.42	3424.97
1033	4216.01	3715.68	3389.69	3427.48
1034	4220.13	3718.50	3391.59	3429.66
1035	4223.99	3720.98	3393.12	3431.47
1036	4227.55	3723.12	3394.28	3432.92
1037	4230.80	3724.93	3395.11	3434.02
1038	4233.91	3726.60	3395.80	3434.97
1039	4236.69	3728.00	3396.26	3435.63
1040	4239.14	3729.20	3396.63	3436.08
1041	4241.28	3730.27	3396.99	3436.39
1042	4243.10	3731.23	3397.38	3436.62
1043	4244.61	3732.05	3397.78	3436.83
1044	4245.84	3732.73	3398.18	3437.07
1045	4246.82	3733.29	3398.58	3437.34
1046	4247.59	3733.74	3398.97	3437.62
1047	4248.18	3734.11	3399.36	3437.91
1048	4248.64	3734.42	3399.74	3438.21
1049	4249.02	3734.68	3400.11	3438.51

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1050	3704.25	4214.17	4772.33	5245.59	5496.14
1051	3704.62	4214.76	4773.53	5248.15	5545.86
1052	3705.00	4215.38	4774.77	5250.74	5549.93
1053	3705.39	4216.04	4776.09	5253.41	5554.06
1054	3705.79	4216.79	4777.55	5256.21	5558.28
1055	3706.21	4217.66	4779.20	5259.18	5562.64
1056	3706.66	4218.67	4781.09	5262.37	5567.14
1057	3707.11	4219.83	4783.26	5265.81	5571.80
1058	3707.57	4221.18	4785.73	5269.50	5576.63
1059	3708.08	4222.73	4788.54	5273.47	5581.62
1060	3708.77	4224.57	4791.69	5277.70	5586.77
1061	3709.76	4226.75	4795.18	5282.20	5592.06
1062	3711.12	4229.32	4799.01	5286.95	5597.48
1063	3712.90	4232.28	4803.18	5291.93	5603.00
1064	3715.13	4235.65	4807.67	5297.13	5608.62
1065	3717.85	4239.44	4812.49	5302.52	5614.30
1066	3721.07	4243.63	4817.60	5308.10	5620.04
1067	3724.81	4248.23	4823.00	5313.84	5625.81
1068	3729.05	4253.21	4828.65	5319.71	5631.59
1069	3733.81	4258.57	4834.53	5325.68	5637.37
1070	3739.08	4264.28	4840.61	5331.75	5643.14
1071	3744.86	4270.33	4846.86	5337.88	5648.89
1072	3751.11	4276.68	4853.24	5344.06	5654.62
1073	3757.71	4283.26	4859.72	5350.27	5660.33
1074	3764.57	4290.00	4866.27	5356.50	5666.02
1075	3771.55	4296.83	4872.85	5362.75	5671.71
1076	3778.53	4303.64	4879.43	5368.99	5677.39
1077	3785.38	4310.37	4885.98	5375.22	5683.09
1078	3791.95	4316.94	4892.45	5381.43	5688.80
1079	3798.16	4323.27	4898.82	5387.61	5694.53

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1050	3208.278	3259.82	3549.91	4095.27	4696.58
1051	3218.511	3270.01	3559.55	4103.83	4703.95
1052	3228.655	3280.10	3569.10	4112.34	4711.30
1053	3238.553	3289.93	3578.42	4120.71	4718.58
1054	3248.660	3299.37	3587.39	4128.83	4725.76
1055	3257.046	3308.28	3595.89	4136.65	4732.79
1056	3265.393	3316.53	3603.81	4144.10	4739.67
1057	3272.996	3324.01	3611.03	4151.10	4746.36
1058	3279.764	3330.61	3617.48	4157.60	4752.84
1059	3285.628	3336.31	3623.13	4163.59	4759.09
1060	3290.497	3341.09	3628.05	4169.08	4765.08
1061	3294.348	3345.00	3632.34	4174.12	4770.78
1062	3297.255	3348.12	3636.03	4178.70	4776.19
1063	3299.409	3350.55	3639.17	4182.84	4781.28
1064	3300.946	3352.39	3641.78	4186.55	4786.06
1065	3301.985	3353.72	3643.92	4189.85	4790.51
1066	3302.647	3354.64	3645.62	4192.75	4794.64
1067	3303.067	3355.25	3646.95	4195.30	4798.47
1068	3303.425	3355.66	3647.95	4197.50	4801.99
1069	3303.789	3355.95	3648.70	4199.42	4805.24
1070	3304.186	3356.18	3649.26	4201.11	4808.22
1071	3304.588	3356.40	3649.76	4202.62	4810.98
1072	3304.989	3356.62	3650.22	4204.02	4813.55
1073	3305.389	3356.85	3650.67	4205.32	4815.97
1074	3305.789	3357.09	3651.13	4206.57	4818.29
1075	3306.187	3357.33	3651.58	4207.80	4820.56
1076	3306.586	3357.58	3652.03	4209.02	4822.84
1077	3306.985	3357.82	3652.49	4210.27	4825.16
1078	3307.385	3358.05	3652.94	4211.59	4827.59
1079	3307.786	3358.27	3653.41	4212.99	4830.17

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CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1050	4249.35	3734.93	3400.48	3438.82
1051	4249.66	3735.16	3400.85	3439.12
1062	4250.00	3735.40	3401.22	3439.42
1053	4250.39	3735.67	3401.59	3439.72
1054	4250.87	3735.99	3401.97	3440.02
1055	4251.50	3736.38	3402.36	3440.31
1056	4252.31	3736.86	3402.75	3440.59
1057	4253.37	3737.45	3403.15	3440.85
1058	4254.71	3738.19	3403.55	3441.07
1059	4256.37	3739.08	3403.95	3441.29
1060	4258.37	3740.10	3404.32	3441.56
1061	4260.74	3741.26	3404.68	3441.96
1062	4263.50	3742.64	3405.12	3442.60
1063	4266.65	3744.35	3405.85	3443.60
1064	4270.21	3746.49	3407.02	3445.05
1065	4274.18	3749.12	3408.70	3447.02
1066	4278.56	3752.28	3411.01	3449.57
1067	4283.34	3756.04	3414.03	3452.76
1068	4288.50	3760.45	3417.88	3456.65
1069	4294.02	3765.50	3422.56	3461.25
1070	4299.88	3771.15	3428.00	3466.51
1071	4305.97	3777.28	3434.08	3472.40
1072	4312.32	3783.80	3440.68	3478.81
1073	4318.85	3790.63	3447.68	3485.62
1074	4325.50	3797.66	3454.94	3492.71
1075	4332.21	3804.80	3462.34	3499.95
1076	4338.92	3811.93	3469.73	3507.17
1077	4345.56	3818.95	3476.98	3514.25
1078	4352.08	3825.76	3483.96	3521.04
1079	4358.41	3832.26	3490.52	3527.42

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1080	4329.31	4905.07	5393.73	5700.28	5654.61
1081	4335.02	4911.15	5399.80	5706.05	5659.70
1082	4340.40	4917.05	5405.78	5711.83	5664.90
1083	4345.43	4922.73	5411.67	5717.61	5670.21
1084	4350.12	4928.18	5417.43	5723.38	5675.61
1085	4354.44	4933.39	5423.06	5729.13	5681.10
1086	4358.40	4938.33	5428.54	5734.84	5686.66
1087	4362.01	4943.01	5433.85	5740.50	5692.29
1088	4365.27	4947.43	5439.00	5746.09	5697.96
1089	4368.21	4951.58	5443.97	5751.62	5703.68
1090	4370.72	4955.36	5448.68	5757.02	5709.42
1091	4372.85	4958.79	5453.14	5762.29	5715.16
1092	4374.78	4962.04	5457.45	5767.48	5720.90
1093	4376.56	4965.12	5461.64	5772.60	5726.62
1094	4378.23	4968.08	5465.72	5777.66	5732.33
1095	4379.83	4970.95	5469.74	5782.68	5738.04
1096	4381.40	4973.79	5473.73	5787.69	5743.73
1097	4382.98	4976.63	5477.72	5792.70	5749.43
1098	4384.60	4979.53	5481.76	5797.73	5755.14
1099	4386.30	4982.53	5485.89	5802.81	5760.85
1100	4388.14	4985.67	5490.12	5807.96	5766.58
1101	4389.05	4989.00	5494.50	5813.19	5772.32
1102	4392.40	4992.54	5499.03	5818.50	5778.07
1103	4394.87	4996.29	5503.72	5823.89	5783.81
1104	4397.64	5000.30	5508.59	5829.37	5789.54
1105	4400.75	5004.59	5513.65	5834.93	5795.23
1106	4404.23	5009.17	5518.91	5840.56	5800.88
1107	4408.10	5014.05	5524.35	5846.26	5806.46
1108	4412.40	5019.24	5529.96	5852.01	5811.95
1109	4417.13	5024.72	5535.75	5857.78	5817.34

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3650.30

3651.25

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3653.43

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3674.19

3679.15

3684.48

3690.10

3695.90

3701.79

3724.12

3740.28

3747.36

3748.90

3750.17

3753.16

3756.98

3759.93

3764.84

3769.89

3777.55

3788.88

3793.41

3798.93

3803.06

3808.93

3813.42

3818.99

3823.09

3828.09

3833.09

3838.09

3843.09

3848.09

3853.09

3858.09

3863.09

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1080	3308.189	3358.48	3653.90	4214.51	4832.94
1081	3308.586	3358.71	3654.47	4216.19	4835.92
1082	3308.952	3359.00	3655.20	4218.09	4839.15
1083	3309.307	3359.39	3656.16	4220.26	4842.64
1084	3309.705	3359.95	3657.41	4222.73	4846.40
1085	3310.279	3360.76	3658.99	4225.52	4850.44
1086	3311.139	3361.90	3660.94	4228.64	4854.75
1087	3312.377	3363.44	3663.27	4232.11	4859.34
1088	3314.059	3365.43	3666.02	4235.93	4864.19
1089	3316.247	3367.89	3669.18	4240.09	4869.30
1090	3319.283	3371.11	3672.96	4244.75	4874.76
1091	3323.280	3375.15	3677.34	4249.85	4880.51
1092	3327.853	3379.68	3682.08	4255.21	4886.41
1093	3332.915	3384.63	3687.13	4260.79	4892.45
1094	3338.354	3389.92	3692.44	4266.55	4898.59
1095	3344.038	3395.43	3697.93	4272.44	4904.79
1096	3349.831	3401.05	3703.52	4278.38	4911.02
1097	3355.599	3406.65	3709.08	4284.31	4917.24
1098	3361.209	3412.10	3714.52	4290.16	4923.42
1099	3366.518	3417.27	3719.74	4295.86	4929.52
1100	3371.393	3422.05	3724.67	4301.36	4935.51
1101	3375.719	3426.37	3729.25	4306.60	4941.35
1102	3379.412	3430.15	3733.44	4311.57	4947.01
1103	3382.533	3433.45	3737.28	4316.26	4952.50
1104	3385.026	3436.19	3740.67	4320.61	4957.74
1105	3386.940	3438.40	3743.61	4324.59	4962.72
1106	3388.338	3440.10	3746.10	4328.19	4967.40
1107	3389.282	3441.33	3748.13	4331.40	4971.79
1108	3389.874	3442.17	3749.74	4334.21	4975.84
1109	3390.263	3442.70	3750.96	4336.64	4979.57

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1080	4364.52	3838.37	3496.58	3533.28
1081	4370.36	3844.02	3502.02	3538.55
1082	4375.90	3849.11	3506.75	3543.18
1083	4381.10	3853.60	3510.70	3547.16
1084	4385.98	3857.50	3513.89	3550.50
1085	4390.47	3860.84	3516.42	3553.25
1086	4394.62	3863.70	3518.36	3555.46
1087	4398.42	3866.11	3519.81	3557.21
1088	4401.87	3868.13	3520.85	3558.53
1089	4405.00	3869.83	3521.57	3559.51
1090	4407.70	3871.16	3521.99	3560.10
1091	4410.01	3872.30	3522.34	3560.48
1092	4412.12	3873.36	3522.70	3560.78
1093	4414.06	3874.36	3523.08	3561.03
1094	4415.87	3875.31	3523.47	3561.26
1095	4417.60	3876.23	3523.88	3561.48
1096	4419.28	3877.13	3524.28	3561.70
1097	4420.98	3878.03	3524.68	3561.92
1098	4422.73	3878.97	3525.09	3562.14
1099	4424.59	3879.93	3525.48	3562.38
1100	4426.59	3880.95	3525.85	3562.65
1101	4428.78	3882.05	3526.20	3562.98
1102	4431.21	3883.24	3526.56	3563.41
1103	4433.87	3884.55	3526.96	3563.98
1104	4436.83	3886.09	3527.54	3564.79
1105	4440.14	3887.95	3528.42	3565.94
1106	4443.80	3890.22	3529.71	3567.52
1107	4447.87	3892.96	3531.53	3569.62
1108	4452.34	3896.26	3534.00	3572.32
1109	4457.25	3900.24	3537.29	3575.74

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1110	3866.03	4422.31	5030.50	5541.67	5863.57
1111	3871.23	4427.97	5036.55	5547.73	5869.34
1112	3877.24	4434.17	5042.87	5553.88	5875.08
1113	3884.12	4440.92	5049.42	5560.12	5880.77
1114	3891.84	4448.21	5056.20	5566.42	5886.40
1115	3900.30	4455.98	5063.18	5572.77	5891.96
1116	3909.44	4464.19	5070.35	5579.16	5897.44
1117	3919.16	4472.79	5077.70	5585.60	5902.85
1118	3929.35	4481.71	5085.21	5592.07	5908.20
1119	3939.89	4490.87	5092.85	5598.57	5913.49
1120	3950.63	4500.17	5100.56	5605.09	5918.76
1121	3961.43	4509.52	5108.29	5611.62	5924.02
1122	3972.11	4518.78	5115.98	5618.14	5929.30
1123	3982.54	4527.86	5123.58	5624.63	5934.61
1124	3992.58	4536.68	5131.04	5631.09	5939.98
1125	4002.12	4545.15	5138.33	5637.51	5945.41
1126	4011.07	4553.24	5145.45	5643.89	5950.91
1127	4019.37	4560.90	5152.38	5650.23	5956.49
1128	4026.94	4568.10	5159.12	5656.52	5962.13
1129	4033.73	4574.80	5165.65	5662.75	5967.83
1130	4039.72	4580.98	5171.96	5668.90	5973.57
1131	4044.97	4586.68	5178.04	5674.96	5979.34
1132	4049.61	4591.95	5183.87	5680.92	5985.12
1133	4053.71	4596.83	5189.45	5686.75	5990.90
1134	4057.34	4601.35	5194.79	5692.45	5996.66
1135	4060.53	4605.52	5199.89	5698.02	6002.40
1136	4063.51	4609.52	5204.87	5703.52	6008.11
1137	4066.14	4613.23	5209.63	5708.88	6013.79
1138	4068.47	4616.68	5214.18	5714.12	6019.42
1139	4070.54	4619.91	5218.57	5719.25	6025.00

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1110	3390.618	3443.04	3751.81	4338.69	4982.94
1111	3391.010	3443.28	3752.40	4340.41	4985.96
1112	3391.411	3443.49	3752.87	4341.86	4988.63
1113	3391.811	3443.73	3753.33	4343.11	4990.94
1114	3392.205	3444.01	3753.78	4344.17	4992.92
1115	3392.592	3444.30	3754.20	4345.04	4994.58
1116	3392.969	3444.60	3754.60	4345.74	4995.97
1117	3393.334	3444.90	3754.97	4346.31	4997.14
1118	3393.690	3445.21	3755.32	4346.79	4998.14
1119	3394.036	3445.51	3755.65	4347.19	4999.03
1120	3394.377	3445.81	3755.98	4347.55	4999.85
1121	3394.716	3446.11	3756.31	4347.91	5000.65
1122	3395.059	3446.41	3756.64	4348.29	5001.49
1123	3395.408	3446.71	3756.98	4348.71	5002.41
1124	3395.767	3447.01	3757.34	4349.21	5003.47
1125	3396.136	3447.31	3757.71	4349.83	5004.70
1126	3396.516	3447.61	3758.12	4350.58	5006.17
1127	3396.905	3447.90	3758.55	4351.49	5007.90
1128	3397.300	3448.17	3759.00	4352.58	5009.94
1129	3397.700	3448.41	3759.46	4353.85	5012.29
1130	3398.101	3448.63	3759.93	4355.31	5014.96
1131	3398.498	3448.86	3760.50	4357.00	5017.96
1132	3398.856	3449.17	3761.30	4358.98	5021.26
1133	3399.222	3449.63	3762.39	4361.28	5024.87
1134	3399.682	3450.29	3763.79	4363.90	5028.76
1135	3400.362	3451.23	3765.51	4366.82	5032.91
1136	3401.183	3452.33	3767.41	4369.90	5037.19
1137	3402.303	3453.75	3769.63	4373.27	5041.70
1138	3403.737	3455.49	3772.15	4376.90	5046.41
1139	3405.475	3457.53	3774.94	4380.76	5051.29

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11	LONGERON 11	ROW 12	LONGERON 12	EARTH END	SPACE END
1110	4462.60	3904.99	3541.58	3580.00	2360.05	7688.06
1111	4468.40	3910.55	3546.92	3585.18	2362.19	7695.26
1112	4474.63	3916.88	3553.26	3591.32	2364.31	7702.27
1113	4481.29	3923.93	3560.54	3598.44	2366.41	7709.07
1114	4488.38	3931.67	3568.72	3606.49	2368.48	7715.64
1115	4495.87	3940.06	3577.73	3615.39	2370.53	7721.98
1116	4503.77	3949.05	3587.46	3625.04	2372.55	7728.08
1117	4512.05	3958.56	3597.84	3635.34	2374.55	7733.97
1118	4520.66	3968.53	3608.73	3646.17	2376.54	7739.68
1119	4529.54	3978.83	3619.99	3657.38	2378.53	7745.26
1120	4538.57	3989.33	3631.48	3668.82	2380.50	7750.76
1121	4547.64	3999.87	3643.02	3680.31	2382.48	7756.23
1122	4556.63	4010.31	3654.44	3691.69	2384.46	7761.75
1123	4565.42	4020.50	3665.58	3702.78	2386.44	7767.37
1124	4573.92	4030.33	3676.30	3713.44	2388.44	7773.14
1125	4582.08	4039.68	3686.48	3723.54	2390.45	7779.10
1126	4589.86	4048.50	3696.02	3732.99	2392.47	7785.27
1127	4597.26	4056.74	3704.83	3741.69	2394.53	7791.66
1128	4604.27	4064.36	3712.86	3749.59	2396.60	7798.27
1129	4610.89	4071.34	3720.05	3756.60	2398.70	7805.10
1130	4617.11	4077.64	3726.36	3762.72	2400.82	7812.11
1131	4622.94	4083.27	3731.78	3767.96	2402.97	7819.30
1132	4628.37	4088.18	3736.27	3772.39	2405.13	7826.63
1133	4633.43	4092.41	3739.89	3776.09	2407.31	7834.07
1134	4638.13	4096.04	3742.75	3779.14	2409.51	7841.59
1135	4642.49	4099.17	3745.02	3781.66	2411.71	7849.16
1136	4646.68	4102.08	3747.03	3783.94	2413.91	7856.76
1137	4650.58	4104.62	3748.62	3785.81	2416.12	7864.38
1138	4654.22	4106.85	3749.88	3787.36	2418.32	7872.00
1139	4657.63	4108.83	3750.87	3788.64	2420.53	7879.61

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1140	4072.41	4622.95	5222.80	5724.27	6030.55
1141	4074.13	4625.86	5226.93	5729.22	6036.06
1142	4075.75	4628.67	5230.97	5734.12	6041.55
1143	4077.32	4631.44	5234.97	5738.99	6047.03
1144	4078.89	4634.21	5238.98	5743.86	6052.51
1145	4080.51	4637.02	5243.02	5748.75	6058.00
1146	4082.22	4639.92	5247.14	5753.70	6063.51
1147	4084.09	4642.97	5251.37	5758.73	6069.06
1148	4086.16	4646.20	5255.76	5763.85	6074.64
1149	4088.50	4649.65	5260.32	5769.09	6080.27
1150	4091.14	4653.37	5265.08	5774.46	6085.95
1151	4094.15	4657.39	5270.07	5779.96	6091.67
1152	4097.57	4661.75	5275.31	5785.61	6097.42
1153	4101.48	4666.48	5280.79	5791.39	6103.19
1154	4105.93	4671.61	5286.54	5797.30	6108.98
1155	4110.99	4677.18	5292.54	5803.34	6114.75
1156	4116.81	4683.26	5298.80	5809.47	6120.50
1157	4123.50	4689.89	5305.31	5815.69	6126.20
1158	4131.09	4697.10	5312.05	5821.98	6131.85
1159	4139.52	4704.85	5319.02	5828.33	6137.41
1160	4148.77	4713.13	5326.22	5834.73	6142.88
1161	4158.79	4721.93	5333.68	5841.19	6148.24
1162	4169.54	4731.24	5341.39	5847.71	6153.51
1163	4180.93	4741.02	5349.37	5854.30	6158.68
1164	4192.87	4751.21	5357.59	5860.96	6163.77
1165	4205.22	4761.72	5366.01	5867.68	6168.79
1166	4217.81	4772.42	5374.55	5874.43	6173.77
1167	4230.45	4783.15	5383.12	5881.19	6178.75
1168	4242.89	4793.74	5391.59	5887.93	6183.76
1169	4254.98	4804.04	5399.88	5894.60	6188.82

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON	ROW 11 LONGERON
1140	3407.491	3459.83	3777.97	4384.81	5056.32	5642.03
1141	3409.739	3462.34	3781.18	4389.01	5061.46	5647.65
1142	3412.155	3465.01	3784.51	4393.31	5066.67	5653.30
1143	3414.659	3467.77	3787.92	4397.67	5071.92	5658.98
1144	3417.163	3470.52	3791.32	4402.03	5077.17	5664.66
1145	3419.583	3473.19	3794.66	4406.33	5082.38	5670.32
1146	3421.835	3475.71	3797.87	4410.53	5087.52	5675.93
1147	3423.854	3478.01	3800.89	4414.59	5092.55	5681.48
1148	3425.591	3480.05	3803.69	4418.44	5097.43	5686.95
1149	3427.022	3481.79	3806.20	4422.07	5102.14	5692.30
1150	3428.131	3483.19	3808.41	4425.43	5106.64	5697.52
1151	3428.935	3484.28	3810.29	4428.49	5110.91	5702.59
1152	3429.483	3485.06	3811.83	4431.25	5114.91	5707.48
1153	3429.870	3485.59	3813.04	4433.67	5118.63	5712.17
1154	3430.225	3485.94	3813.93	4435.76	5122.05	5716.63
1155	3430.608	3486.19	3814.56	4437.53	5125.13	5720.83
1156	3431.010	3486.41	3815.05	4439.04	5127.88	5724.76
1157	3431.409	3486.64	3815.51	4440.33	5130.26	5728.39
1158	3431.805	3486.91	3815.96	4441.42	5132.30	5731.72
1159	3432.192	3487.20	3816.39	4442.30	5133.97	5734.73
1160	3432.567	3487.50	3816.78	4442.98	5135.32	5737.45
1161	3432.926	3487.81	3817.14	4443.48	5136.38	5739.88
1162	3433.267	3488.11	3817.46	4443.85	5137.20	5742.05
1163	3433.588	3488.40	3817.77	4444.11	5137.84	5744.01
1164	3433.890	3488.68	3818.05	4444.29	5138.34	5745.80
1165	3434.175	3488.95	3818.32	4444.42	5138.76	5747.47
1166	3434.451	3489.21	3818.58	4444.53	5139.14	5749.07
1167	3434.725	3489.47	3818.84	4444.64	5139.51	5750.66
1168	3435.007	3489.74	3819.10	4444.76	5139.91	5752.30
1169	3435.303	3490.02	3819.38	4444.93	5140.38	5754.05

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1140	4660.87	4110.62	3751.68	3789.72
1141	4663.97	4112.29	3752.37	3790.66
1142	4666.97	4113.87	3752.98	3791.52
1143	4669.93	4115.41	3753.56	3792.32
1144	4672.89	4116.94	3754.13	3793.13
1145	4675.89	4118.52	3754.74	3793.98
1146	4678.98	4120.18	3755.43	3794.92
1147	4682.22	4121.98	3756.24	3796.00
1148	4685.64	4123.96	3757.23	3797.28
1149	4689.28	4126.19	3758.49	3798.83
1150	4693.19	4128.74	3760.09	3800.72
1151	4697.40	4131.67	3762.13	3803.02
1152	4701.94	4135.07	3764.72	3805.83
1153	4706.85	4139.05	3768.02	3809.25
1154	4712.15	4143.72	3772.19	3813.42
1155	4717.87	4149.13	3777.34	3818.42
1156	4724.00	4155.30	3783.46	3824.35
1157	4730.57	4162.19	3790.55	3831.25
1158	4737.59	4169.82	3798.59	3839.16
1159	4745.07	4178.18	3807.55	3848.02
1160	4753.04	4187.27	3817.41	3857.79
1161	4761.52	4197.07	3828.11	3868.43
1162	4770.56	4207.57	3839.60	3879.88
1163	4780.14	4218.72	3851.79	3892.03
1164	4790.21	4230.44	3864.56	3904.77
1165	4800.69	4242.59	3877.76	3917.96
1166	4811.42	4255.01	3891.23	3931.41
1167	4822.19	4267.47	3904.75	3944.90
1168	4832.77	4279.73	3918.06	3958.19
1169	4842.98	4291.59	3930.98	3971.09

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1170	4266.56	4813.95	5407.93	5901.22	6193.96
1171	4277.52	4823.42	5415.73	5907.76	6199.20
1172	4287.79	4832.39	5423.27	5914.24	6204.53
1173	4297.29	4840.84	5430.55	5920.66	6209.97
1174	4306.00	4848.77	5437.60	5927.02	6215.50
1175	4313.89	4856.17	5444.42	5933.34	6221.12
1176	4320.90	4863.01	5451.01	5939.58	6226.80
1177	4327.03	4869.28	5457.36	5945.75	6232.53
1178	4332.35	4875.03	5463.47	5951.82	6238.30
1179	4337.04	4880.33	5469.32	5957.79	6244.08
1180	4341.16	4885.23	5474.91	5963.63	6249.86
1181	4344.80	4889.75	5480.26	5969.33	6255.63
1182	4348.00	4893.93	5485.36	5974.91	6261.36
1183	4350.83	4897.81	5490.24	5980.35	6267.06
1184	4353.34	4901.41	5494.92	5985.66	6272.72
1185	4355.58	4904.79	5499.42	5990.86	6278.33
1186	4357.61	4907.97	5503.77	5995.96	6283.91
1187	4359.47	4911.02	5508.00	6000.99	6289.46
1188	4361.23	4913.96	5512.16	6005.96	6294.98
1189	4362.93	4916.85	5516.26	6010.89	6300.49
1190	4364.63	4919.74	5520.37	6015.84	6306.00
1191	4366.39	4922.69	5524.53	6020.81	6311.52
1192	4368.26	4925.73	5528.76	6025.84	6317.07
1193	4370.30	4928.93	5533.12	6030.94	6322.65
1194	4372.55	4932.31	5537.62	6036.15	6328.27
1195	4375.06	4935.92	5542.31	6041.46	6333.92
1196	4377.90	4939.80	5547.19	6046.90	6339.62
1197	4381.10	4943.98	5552.29	6052.48	6345.36
1198	4384.72	4948.49	5557.63	6058.18	6351.12
1199	4388.82	4953.37	5563.21	6064.01	6356.90

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
1170	3435.618	3490.31	3819.68	4445.16	5140.97
1171	3435.952	3490.60	3819.99	4445.48	5141.72
1172	3436.306	3490.91	3820.34	4445.94	5142.70
1173	3436.676	3491.21	3820.72	4446.56	5143.95
1174	3437.059	3491.50	3821.13	4447.37	5145.51
1175	3437.452	3491.78	3821.58	4448.39	5147.42
1176	3437.851	3492.03	3822.03	4449.60	5149.68
1177	3438.252	3492.25	3822.50	4451.02	5152.29
1178	3438.654	3492.47	3823.05	4452.68	5155.25
1179	3439.014	3492.78	3823.83	4454.64	5158.53
1180	3439.378	3493.23	3824.90	4456.93	5162.13
1181	3439.834	3493.88	3826.29	4459.53	5166.01
1182	3440.506	3494.82	3828.01	4462.45	5170.15
1183	3441.450	3496.05	3830.05	4465.66	5174.53
1184	3442.693	3497.60	3832.39	4469.13	5179.12
1185	3444.225	3499.43	3835.00	4472.84	5183.89
1186	3446.023	3501.53	3837.84	4476.74	5188.81
1187	3448.044	3503.83	3840.87	4480.79	5193.84
1188	3450.229	3506.29	3844.03	4484.95	5198.95
1189	3452.516	3508.84	3847.27	4489.17	5204.10
1190	3454.788	3511.38	3850.49	4493.39	5209.25
1191	3456.968	3513.83	3853.65	4497.55	5214.36
1192	3458.981	3516.13	3856.67	4501.59	5219.38
1193	3460.768	3518.21	3859.50	4505.49	5224.30
1194	3462.290	3520.04	3862.10	4509.19	5229.06
1195	3463.524	3521.58	3864.44	4512.65	5233.64
1196	3464.465	3522.81	3866.47	4515.86	5238.02
1197	3465.139	3523.74	3868.19	4518.77	5242.17
1198	3465.600	3524.41	3869.59	4521.39	5246.06
1199	3465.966	3524.87	3870.68	4523.69	5249.67

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1170	4862.73	4302.93	3943.36	3983.45
1171	4861.94	4313.65	3955.09	3995.13
1172	4870.60	4323.68	3966.06	4006.04
1173	4878.74	4333.01	3976.20	4016.10
1174	4886.38	4341.61	3985.47	4025.28
1175	4893.55	4349.50	3993.83	4033.52
1176	4900.28	4356.65	4001.26	4040.78
1177	4906.57	4363.08	4007.73	4047.06
1178	4912.45	4368.79	4013.26	4052.40
1179	4917.91	4373.75	4017.82	4056.89
1180	4922.98	4378.01	4021.47	4060.62
1181	4927.69	4381.66	4024.35	4063.69
1182	4932.06	4384.80	4026.64	4066.22
1183	4936.12	4387.54	4028.46	4068.32
1184	4939.91	4389.95	4029.91	4070.06
1185	4943.48	4392.10	4031.07	4071.51
1186	4946.86	4394.03	4032.02	4072.75
1187	4950.09	4395.83	4032.83	4073.83
1188	4953.22	4397.53	4033.55	4074.80
1189	4956.30	4399.17	4034.22	4075.72
1190	4959.38	4400.82	4034.89	4076.65
1191	4962.52	4402.52	4035.62	4077.63
1192	4965.76	4404.32	4036.43	4078.71
1193	4969.15	4406.27	4037.39	4079.96
1194	4972.72	4408.42	4038.57	4081.42
1195	4976.52	4410.84	4040.02	4083.17
1196	4980.58	4413.58	4041.85	4085.27
1197	4984.95	4416.72	4044.13	4087.80
1198	4989.65	4420.35	4046.99	4090.85
1199	4994.70	4424.58	4050.60	4094.54

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1200	4393.45	4958.63	5569.04	6069.97	6362.69
1201	4398.69	4964.32	5575.12	6076.03	6368.45
1202	4404.68	4970.51	5581.42	6082.18	6374.20
1203	4411.47	4977.21	5587.95	6088.41	6379.89
1204	4419.09	4984.44	5594.71	6094.70	6385.53
1205	4427.46	4992.14	5601.66	6101.04	6391.10
1206	4436.53	5000.31	5608.81	6107.43	6396.59
1207	4446.25	5008.90	5616.16	6113.87	6402.00
1208	4456.53	5017.89	5623.71	6120.35	6407.33
1209	4467.28	5027.20	5631.42	6126.87	6412.60
1210	4478.37	5036.75	5639.27	6133.43	6417.82
1211	4489.66	5046.45	5647.20	6140.01	6423.00
1212	4500.98	5056.18	5655.14	6146.59	6428.18
1213	4512.17	5065.81	5663.04	6153.16	6433.38
1214	4523.08	5075.23	5670.81	6159.69	6438.63
1215	4533.56	5084.35	5678.42	6166.19	6443.93
1216	4543.49	5093.09	5685.85	6172.64	6449.31
1217	4552.78	5101.40	5693.07	6179.05	6454.78
1218	4561.35	5109.24	5700.08	6185.40	6460.32
1219	4569.14	5116.58	5706.87	6191.71	6465.95
1220	4576.32	5123.53	5713.51	6197.97	6471.62
1221	4582.61	5129.90	5719.90	6204.15	6477.35
1222	4588.05	5135.73	5726.04	6210.24	6483.11
1223	4592.77	5141.05	5731.91	6216.21	6488.89
1224	4596.86	5145.93	5737.49	6222.04	6494.67
1225	4600.39	5150.37	5742.77	6227.72	6500.43
1226	4603.40	5154.39	5747.77	6233.22	6506.15
1227	4605.95	5158.03	5752.47	6238.55	6511.81
1228	4608.08	5161.31	5756.89	6243.70	6517.41
1229	4609.84	5164.26	5761.05	6248.68	6522.93

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CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
1200	3466.324	3525.18	3871.48	4525.68	5252.98
1201	3466.720	3525.41	3872.05	4527.37	5255.98
1202	3467.121	3525.63	3872.53	4528.83	5258.65
1203	3467.521	3525.87	3872.98	4530.10	5261.00
1204	3467.916	3526.14	3873.44	4531.18	5263.02
1205	3468.304	3526.43	3873.87	4532.08	5264.72
1206	3468.682	3526.73	3874.27	4532.80	5266.14
1207	3469.048	3527.03	3874.64	4533.37	5267.31
1208	3469.401	3527.34	3874.98	4533.82	5268.28
1209	3469.741	3527.64	3875.31	4534.19	5269.10
1210	3470.072	3527.93	3875.63	4534.49	5269.81
1211	3470.396	3528.22	3875.93	4534.77	5270.48
1212	3470.719	3528.52	3876.24	4535.03	5271.13
1213	3471.047	3528.81	3876.55	4535.32	5271.82
1214	3471.383	3529.11	3876.87	4535.66	5272.59
1215	3471.731	3529.41	3877.21	4536.07	5273.49
1216	3472.092	3529.71	3877.57	4536.60	5274.58
1217	3472.466	3530.01	3877.96	4537.27	5275.92
1218	3472.852	3530.31	3878.38	4538.11	5277.54
1219	3473.245	3530.59	3878.83	4539.15	5279.48
1220	3473.643	3530.84	3879.28	4540.33	5281.68
1221	3474.044	3531.06	3879.74	4541.72	5284.22
1222	3474.447	3531.28	3880.27	4543.34	5287.13
1223	3474.809	3531.58	3881.04	4545.28	5290.40
1224	3475.176	3532.04	3882.13	4547.58	5294.01
1225	3475.676	3532.76	3883.60	4550.26	5297.96
1226	3476.477	3533.84	3885.47	4553.32	5302.22
1227	3477.679	3535.34	3887.77	4556.76	5306.78
1228	3479.344	3537.31	3890.50	4560.57	5311.63
1229	3481.520	3539.76	3893.65	4564.72	5316.73

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1200	5000.13	4429.47	4055.08	4098.96
1201	5005.95	4435.09	4060.48	4104.19
1202	5012.17	4441.39	4066.79	4110.30
1203	5018.79	4448.38	4073.99	4117.33
1204	5025.82	4456.03	4082.06	4125.27
1205	5033.27	4464.34	4090.95	4134.06
1206	5041.12	4473.26	4100.62	4143.64
1207	5049.40	4482.78	4110.99	4153.94
1208	5058.08	4492.84	4121.98	4164.87
1209	5067.12	4503.34	4133.47	4176.31
1210	5076.43	4514.18	4145.33	4188.13
1211	5085.92	4525.22	4157.40	4200.17
1212	5095.43	4536.29	4169.51	4212.24
1213	5104.84	4547.24	4181.48	4224.17
1214	5114.00	4557.90	4193.14	4235.79
1215	5122.83	4568.14	4204.34	4246.93
1216	5131.25	4577.86	4214.95	4257.48
1217	5139.25	4586.99	4224.85	4267.30
1218	5146.81	4595.47	4233.97	4276.32
1219	5153.93	4603.27	4242.23	4284.45
1220	5160.74	4610.57	4249.84	4291.91
1221	5167.12	4617.13	4256.49	4298.37
1222	5173.05	4622.95	4262.16	4303.84
1223	5178.54	4627.95	4266.77	4308.38
1224	5183.59	4632.17	4270.37	4312.06
1225	5188.21	4635.69	4273.10	4315.00
1226	5192.43	4638.63	4275.15	4317.30
1227	5198.25	4641.08	4276.84	4319.09
1228	5199.72	4643.11	4277.69	4320.43
1229	5202.86	4644.82	4278.41	4321.41

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1230	4811.30	5166.92	5764.96	6253.48	6528.38
1231	4812.50	5169.32	5768.65	6258.12	6533.75
1232	4813.50	5171.51	5772.15	6262.63	6539.04
1233	4814.34	5173.54	5775.48	6267.01	6544.27
1234	4815.09	5175.45	5778.70	6271.30	6549.45
1235	4815.77	5177.28	5781.85	6275.54	6554.60
1236	4816.43	5179.08	5784.96	6279.74	6559.73
1237	4817.11	5180.90	5788.98	6283.96	6564.87
1238	4817.82	5182.77	5791.26	6288.22	6570.03
1239	4818.62	5184.74	5794.54	6292.56	6575.24
1240	4819.53	5186.85	5797.96	6297.01	6580.50
1241	4820.63	5189.14	5801.55	6301.58	6585.83
1242	4821.94	5191.66	5805.34	6306.30	6591.24
1243	4823.52	5194.44	5809.35	6311.17	6596.72
1244	4825.41	5197.50	5813.61	6316.21	6602.27
1245	4827.68	5200.89	5818.11	6321.41	6607.89
1246	4830.31	5204.61	5822.88	6326.78	6613.56
1247	4833.38	5208.68	5827.90	6332.31	6619.29
1248	4836.91	5213.12	5833.19	6337.99	6625.04
1249	4840.91	5217.93	5838.73	6343.80	6630.82
1250	4845.42	5223.10	5844.50	6349.72	6636.61
1251	4850.46	5228.65	5850.50	6355.75	6642.38
1252	4856.06	5234.59	5856.69	6361.86	6648.14
1253	4862.30	5240.94	5863.07	6368.04	6653.87
1254	4869.07	5247.62	5869.60	6374.26	6659.57
1255	4876.28	5254.59	5876.24	6380.53	6665.24
1256	4883.81	5261.76	5882.97	6386.81	6670.88
1257	4891.54	5269.06	5889.75	6393.11	6676.51
1258	4899.34	5276.40	5896.56	6399.42	6682.14
1259	4707.08	5283.71	5903.33	6405.72	6687.76

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1230	3484.236	3542.70	3897.21	4569.20	5322.07
1231	3487.518	3546.14	3901.15	4573.97	5327.60
1232	3491.346	3550.03	3905.42	4579.00	5333.30
1233	3495.639	3554.32	3909.98	4584.23	5339.13
1234	3500.288	3558.91	3914.76	4589.63	5345.06
1235	3505.168	3563.70	3919.70	4595.13	5351.05
1236	3510.147	3568.58	3924.69	4600.67	5357.07
1237	3515.086	3573.43	3929.67	4606.20	5363.08
1238	3519.852	3578.12	3934.53	4611.64	5369.04
1239	3524.317	3582.56	3939.19	4616.96	5374.92
1240	3528.373	3586.64	3943.60	4622.08	5380.68
1241	3531.933	3590.31	3947.71	4626.98	5386.30
1242	3534.940	3593.52	3951.48	4631.62	5391.75
1243	3537.426	3596.25	3954.87	4635.97	5396.99
1244	3539.409	3598.52	3957.87	4640.00	5402.00
1245	3540.931	3600.35	3960.47	4643.70	5406.76
1246	3542.039	3601.75	3962.68	4647.05	5411.26
1247	3542.799	3602.79	3964.50	4650.07	5415.49
1248	3543.300	3603.50	3965.97	4652.75	5419.44
1249	3543.674	3603.99	3967.11	4655.11	5423.10
1250	3544.029	3604.33	3967.97	4657.16	5426.48
1251	3544.410	3604.59	3968.61	4658.95	5429.58
1252	3544.813	3604.80	3969.12	4660.52	5432.42
1253	3545.214	3605.02	3969.59	4661.91	5434.98
1254	3545.613	3605.26	3970.04	4663.18	5437.34
1255	3546.011	3605.52	3970.49	4664.36	5439.52
1256	3546.407	3605.79	3970.95	4665.46	5441.57
1257	3546.801	3606.07	3971.41	4666.52	5443.55
1258	3547.195	3606.35	3971.86	4667.56	5445.49
1259	3547.590	3606.63	3972.31	4668.61	5447.46

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11	LONG/ROW 11	ROW 12	LONG/ROW 12	EARTH END	SPACE END
1230	5205.71	4646.26	4278.91	4322.12	2612.77	8495.91
1231	5208.30	4647.54	4279.30	4322.64	2614.95	8503.39
1232	5210.68	4648.71	4279.66	4323.05	2617.13	8510.80
1233	5212.89	4649.80	4280.01	4323.39	2619.30	8518.15
1234	5214.97	4650.85	4280.37	4323.68	2621.46	8525.45
1235	5216.97	4651.87	4280.74	4323.95	2623.61	8532.72
1236	5218.93	4652.88	4281.12	4324.21	2625.77	8539.97
1237	5220.92	4653.89	4281.49	4324.47	2627.92	8547.23
1238	5222.96	4654.92	4281.86	4324.75	2630.08	8554.52
1239	5225.10	4656.00	4282.22	4325.06	2632.24	8561.85
1240	5227.40	4657.13	4282.57	4325.43	2634.42	8569.23
1241	5229.88	4658.35	4282.93	4325.89	2636.60	8576.67
1242	5232.58	4659.69	4283.35	4326.49	2638.79	8584.18
1243	5235.55	4661.23	4283.93	4327.31	2640.98	8591.74
1244	5238.81	4663.05	4284.77	4328.41	2643.19	8599.33
1245	5242.38	4665.20	4285.94	4329.88	2645.39	8606.95
1246	5246.29	4667.75	4287.54	4331.76	2647.60	8614.57
1247	5250.55	4670.75	4289.66	4334.14	2649.80	8622.15
1248	5255.17	4674.27	4292.39	4337.07	2652.00	8629.69
1249	5260.16	4678.38	4295.85	4340.64	2654.18	8637.15
1250	5265.50	4683.12	4300.13	4344.89	2656.35	8644.50
1251	5271.20	4688.50	4305.23	4349.85	2658.50	8651.74
1252	5277.22	4694.47	4311.09	4355.52	2660.63	8658.85
1253	5283.57	4700.99	4317.69	4361.93	2662.75	8665.80
1254	5290.18	4707.95	4324.86	4368.93	2664.85	8672.63
1255	5297.00	4715.27	4332.50	4376.41	2666.94	8679.34
1256	5303.99	4722.86	4340.48	4384.26	2669.01	8685.97
1257	5311.06	4730.61	4348.68	4392.33	2671.08	8692.54
1258	5318.21	4738.42	4356.95	4400.47	2673.15	8699.08
1259	5325.31	4746.18	4365.15	4408.55	2675.22	8705.65

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CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON	ROW 2 LONGERON	ROW 3 LONGERON	ROW 4 LONGERON	ROW 5 LONGERON
1260	4714.63	5290.99	5910.06	6412.01	6693.41
1261	4721.85	5297.86	5916.71	6418.27	6699.08
1262	4728.61	5304.54	5923.23	6424.50	6704.78
1263	4734.83	5310.88	5929.60	6430.67	6710.51
1264	4740.43	5316.81	5935.80	6436.78	6716.26
1265	4745.43	5322.34	5941.78	6442.80	6722.04
1266	4749.86	5327.46	5947.52	6448.71	6727.82
1267	4753.74	5332.17	5952.99	6454.49	6733.60
1268	4757.08	5336.46	5958.17	6460.11	6739.35
1269	4759.90	5340.33	5963.05	6465.54	6745.04
1270	4762.23	5343.77	5967.60	6470.78	6750.67
1271	4764.09	5346.81	5971.83	6475.80	6756.22
1272	4765.52	5349.45	5975.73	6480.59	6761.66
1273	4766.58	5351.71	5979.29	6485.14	6766.98
1274	4767.34	5353.63	5982.51	6489.44	6772.16
1275	4767.87	5355.25	5985.42	6493.49	6777.20
1276	4768.34	5356.67	5988.02	6497.28	6782.09
1277	4768.80	5357.91	5990.33	6500.83	6786.82
1278	4769.25	5359.02	5992.39	6504.17	6791.42
1279	4769.69	5360.00	5994.23	6507.32	6795.90
1280	4770.12	5360.89	5995.91	6510.32	6800.27
1281	4770.53	5361.70	5997.48	6513.22	6804.57
1282	4770.94	5362.48	5998.99	6516.07	6808.83
1283	4771.35	5363.26	6000.49	6518.91	6813.09
1284	4771.76	5364.06	6002.05	6521.80	6817.38
1285	4772.19	5364.93	6003.71	6524.79	6821.74
1286	4772.63	5365.90	6005.52	6527.91	6826.19
1287	4773.08	5366.98	6007.54	6531.20	6830.76
1288	4773.54	5368.19	6009.78	6534.70	6835.47
1289	4774.00	5369.55	6012.29	6538.42	6840.31

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW	6 LONGERON	6	ROW	7 LONGERON	7	ROW	8 LONGERON	8	ROW	9 LONGERON	9	ROW 10 LONGERON	10
1260	3547.985	3606.90	3972.77	4669.71	5449.51	6146.00	6638.68	6720.86	6516.00	5969.42				
1261	3548.383	3607.16	3973.22	4670.88	5451.69	6149.46	6643.38	6728.49	6522.32	5976.03				
1262	3548.782	3607.39	3973.67	4672.15	5454.04	6153.06	6648.18	6732.16	6528.60	5982.51				
1263	3549.184	3607.61	3974.14	4673.55	5456.62	6156.86	6653.09	6737.87	6534.83	5988.84				
1264	3549.586	3607.83	3974.65	4675.12	5459.46	6160.88	6658.12	6743.62	6540.99	5994.99				
1265	3549.985	3608.09	3975.30	4676.92	5462.58	6165.09	6663.29	6749.39	6547.06	6000.95				
1266	3550.319	3608.45	3976.20	4679.02	5466.00	6169.55	6668.59	6755.18	6553.03	6006.70				
1267	3550.711	3608.99	3977.43	4681.46	5469.74	6174.25	6674.01	6760.98	6558.87	6012.19				
1268	3551.304	3609.82	3979.04	4684.28	5473.80	6179.18	6679.55	6766.76	6564.56	6017.42				
1269	3552.255	3611.06	3981.08	4687.49	5478.18	6184.33	6685.18	6772.49	6570.07	6022.35				
1270	3553.692	3612.81	3983.60	4691.13	5482.89	6189.68	6689.88	6778.17	6575.38	6026.96				
1271	3555.724	3615.12	3986.64	4695.19	5487.93	6195.24	6696.65	6783.77	6550.49	6031.25				
1272	3558.480	3618.10	3990.23	4699.69	5493.28	6200.97	6702.46	6789.27	6585.37	6035.20				
1273	3562.126	3621.84	3994.39	4704.63	5498.93	6206.86	6708.30	6794.66	6590.02	6038.81				
1274	3566.749	3626.41	3999.16	4710.01	5504.85	6212.89	6714.13	6799.92	6594.43	6042.07				
1275	3572.339	3631.84	4004.58	4715.85	5511.02	6219.02	6719.94	6805.04	6598.59	6045.00				
1276	3578.785	3638.11	4010.73	4722.16	5517.42	6225.24	6725.73	6810.00	6602.51	6047.61				
1277	3586.008	3645.19	4017.59	4728.93	5524.02	6231.53	6731.47	6814.82	6606.21	6049.95				
1278	3593.909	3652.98	4025.10	4736.12	5530.78	6237.87	6737.17	6819.51	6609.70	6052.05				
1279	3602.377	3661.36	4033.13	4743.63	5537.69	6244.24	6742.83	6824.07	6613.01	6053.95				
1280	3611.285	3670.18	4041.56	4751.40	5544.71	6250.64	6748.44	6828.52	6616.18	6055.70				
1281	3620.497	3679.32	4050.26	4759.36	5551.80	6257.06	6754.03	6832.91	6619.26	6057.34				
1282	3629.869	3688.62	4059.11	4767.40	5558.94	6263.49	6759.60	6837.26	6622.28	6058.94				
1283	3639.249	3697.93	4067.96	4775.45	5566.08	6269.92	6765.17	6841.60	6625.30	6060.53				
1284	3648.488	3707.10	4076.69	4783.42	5573.18	6276.34	6770.75	6845.98	6628.37	6062.17				
1285	3657.447	3715.98	4085.16	4791.23	5580.21	6282.75	6776.37	6850.43	6631.53	6063.90				
1286	3665.999	3724.44	4093.27	4798.79	5587.14	6289.13	6782.01	6854.97	6634.82	6065.77				
1287	3674.025	3732.36	4100.89	4806.05	5593.94	6296.47	6787.71	6859.63	6638.27	6067.82				
1288	3681.425	3739.62	4107.93	4812.93	5600.58	6301.77	6793.44	6864.41	6641.91	6070.10				
1289	3688.115	3746.15	4819.38	5607.04	6308.01	6799.21	6869.34	6872.63	6645.76					

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CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1260	5332.31	4753.78	4373.14	4416.41
1261	5339.14	4761.11	4380.79	4423.91
1262	5345.74	4768.06	4387.96	4430.90
1263	5352.08	4774.57	4394.53	4437.28
1264	5358.10	4780.53	4400.39	4442.95
1265	5363.78	4785.88	4405.44	4447.87
1266	5369.07	4790.52	4409.59	4452.01
1267	5373.96	4794.47	4412.85	4455.40
1268	5378.43	4797.77	4415.32	4458.10
1269	5382.49	4800.50	4417.13	4460.19
1270	5386.13	4802.73	4418.38	4461.73
1271	5389.35	4804.51	4419.18	4462.80
1272	5392.18	4805.95	4419.67	4463.50
1273	5394.63	4807.15	4420.03	4463.94
1274	5396.72	4808.20	4420.39	4464.24
1275	5398.48	4809.13	4420.80	4464.46
1276	5399.93	4809.92	4421.20	4464.68
1277	5401.11	4810.58	4421.60	4464.92
1278	5402.07	4811.13	4421.99	4465.19
1279	5402.85	4811.59	4422.38	4465.47
1280	5403.50	4811.99	4422.77	4465.76
1281	5404.06	4812.34	4423.16	4466.06
1282	5404.58	4812.68	4423.54	4466.35
1283	5405.09	4813.01	4423.92	4466.65
1284	5405.65	4813.36	4424.30	4466.94
1285	5406.28	4813.75	4424.69	4467.24
1286	5407.03	4814.20	4425.08	4467.52
1287	5407.95	4814.73	4425.48	4467.80
1288	5409.08	4815.36	4425.88	4468.04
1289	5410.44	4816.11	4426.28	4468.27

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1290	4774.50	5371.09	6015.08	6542.37	6845.29
1291	4775.14	5372.87	6018.16	6546.55	6850.41
1292	4776.02	5374.93	6021.53	6550.96	6855.65
1293	4777.20	5377.31	6025.20	6555.59	6861.01
1294	4778.70	5380.02	6029.15	6560.43	6866.48
1295	4780.57	5383.06	6033.38	6565.45	6872.02
1296	4782.80	5386.42	6037.87	6570.65	6877.63
1297	4785.39	5390.11	6042.61	6576.00	6883.30
1298	4788.35	5394.08	6047.57	6581.48	6889.02
1299	4791.64	5398.33	6052.72	6587.08	6894.76
1300	4795.23	5402.83	6058.05	6592.78	6900.52
1301	4799.09	5407.52	6063.51	6598.55	6906.30
1302	4803.16	5412.37	6069.07	6604.37	6912.08
1303	4807.36	5417.33	6074.71	6610.23	6917.86
1304	4811.64	5422.33	6080.38	6616.11	6923.64
1305	4815.91	5427.34	6086.04	6621.98	6929.42
1306	4820.07	5432.25	6091.65	6627.83	6935.21
1307	4824.05	5437.04	6097.18	6633.63	6940.98
1308	4827.80	5441.66	6102.58	6639.37	6946.75
1309	4831.26	5446.04	6107.83	6645.03	6952.51
1310	4834.39	5450.16	6112.90	6650.57	6958.24
1311	4837.16	5453.99	6117.74	6655.99	6963.93
1312	4839.55	5457.49	6122.34	6661.25	6969.57
1313	4841.54	5460.64	6126.66	6666.34	6975.14
1314	4843.14	5463.44	6130.69	6671.23	6980.62
1315	4844.37	5465.88	6134.41	6675.89	6986.00
1316	4845.26	5467.95	6137.79	6680.31	6991.25
1317	4845.87	5469.69	6140.83	6684.46	6996.35
1318	4846.35	5471.16	6143.51	6688.32	7001.28
1319	4846.81	5472.41	6145.83	6691.88	7006.02

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1290	3694.032	3751.89	4119.99	4825.40	5613.30
1291	3699.102	3756.85	4125.05	4830.99	5619.34
1292	3703.288	3761.05	4129.54	4836.17	5625.14
1293	3706.629	3764.53	4133.52	4840.97	5630.70
1294	3709.246	3767.39	4137.00	4845.39	5635.99
1295	3711.274	3769.70	4140.04	4849.45	5641.02
1296	3712.818	3771.55	4142.66	4853.17	5645.80
1297	3713.970	3773.00	4144.91	4856.56	5650.33
1298	3714.814	3774.13	4146.83	4859.67	5654.63
1299	3715.435	3775.00	4148.48	4862.52	5658.72
1300	3715.907	3775.68	4149.90	4865.16	5662.63
1301	3716.303	3776.23	4151.15	4867.62	5666.38
1302	3716.672	3776.70	4152.25	4869.94	5670.01
1303	3717.031	3777.12	4153.28	4872.17	5673.55
1304	3717.387	3777.52	4154.26	4874.36	5677.06
1305	3717.743	3777.92	4155.24	4876.55	5680.57
1306	3718.105	3778.36	4156.29	4878.81	5684.15
1307	3718.483	3778.86	4157.45	4881.19	5687.82
1308	3718.899	3779.46	4158.77	4883.72	5691.63
1309	3719.431	3780.22	4160.29	4886.45	5695.62
1310	3720.150	3781.20	4162.06	4889.42	5699.81
1311	3721.148	3782.49	4164.15	4892.68	5704.23
1312	3722.516	3784.17	4166.62	4898.25	5708.90
1313	3724.361	3786.31	4169.50	4900.19	5713.84
1314	3726.806	3789.00	4172.86	4904.51	5719.07
1315	3730.013	3792.37	4176.75	4909.25	5724.58
1316	3734.171	3796.55	4181.22	4914.42	5730.37
1317	3739.367	3801.62	4186.37	4920.06	5736.44
1318	3745.586	3807.66	4192.32	4926.25	5742.78
1319	3752.796	3814.73	4199.17	4933.01	5749.38

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1290	5412.08	4816.99	4426.68	4468.48
1291	5414.02	4817.98	4427.06	4468.74
1292	5416.26	4819.10	4427.41	4469.09
1293	5418.83	4820.36	4427.79	4469.60
1294	5421.73	4821.84	4428.33	4470.35
1295	5424.96	4823.63	4429.13	4471.43
1296	5428.51	4825.77	4430.29	4472.87
1297	5432.39	4828.27	4431.83	4474.71
1298	5436.55	4831.14	4433.00	4476.95
1299	5440.99	4834.39	4436.21	4479.59
1300	5445.66	4837.98	4439.03	4482.60
1301	5450.54	4841.90	4442.25	4485.97
1302	5455.56	4846.08	4445.80	4489.61
1303	5460.69	4850.44	4449.59	4493.44
1304	5465.88	4854.90	4453.49	4497.38
1305	5471.06	4859.35	4457.39	4501.31
1306	5476.15	4863.64	4461.09	4505.08
1307	5481.12	4867.72	4464.51	4508.61
1308	5485.91	4871.50	4467.56	4511.82
1309	5490.48	4874.94	4470.19	4514.67
1310	5494.79	4878.00	4472.39	4517.12
1311	5498.80	4880.68	4474.13	4519.14
1312	5502.49	4882.97	4475.45	4520.75
1313	5505.84	4884.87	4476.37	4521.96
1314	5508.83	4886.44	4476.97	4522.79
1315	5511.45	4887.73	4477.37	4523.33
1316	5513.71	4888.85	4477.72	4523.69
1317	5515.80	4889.83	4478.10	4523.93
1318	5517.13	4890.66	4478.51	4524.15
1319	5518.32	4891.32	4478.90	4524.39

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW	1 LONGERON	1	ROW	2 LONGERON	2	ROW	3 LONGERON	3	ROW	4 LONGERON	4	ROW	5 LONGERON	5
1320	4847.26	5473.46	6147.78	6695.13	7010.56	6891.26	6478.67	5729.08	4916.22	4209.12					
1321	4847.68	5474.30	6149.39	6698.07	7014.89	6896.70	6485.04	5736.01	4923.72	4217.55					
1322	4848.07	5474.95	6150.69	6700.72	7019.00	6902.04	6491.46	5743.21	4931.70	4226.69					
1323	4848.42	5475.45	6151.73	6703.11	7022.91	6907.26	6497.91	5750.67	4940.17	4236.51					
1324	4848.75	5475.81	6152.55	6705.27	7026.63	6912.38	6504.41	5758.39	4949.13	4246.96					
1325	4849.06	5476.09	6153.21	6707.25	7030.18	6917.40	6510.93	5766.38	4958.55	4257.95					
1326	4849.35	5476.31	6153.77	6709.10	7033.60	6922.35	6517.48	5774.57	4968.34	4269.37					
1327	4849.63	5476.49	6154.27	6710.87	7036.94	6927.24	6524.04	5782.89	4978.38	4281.06					
1328	4849.91	5476.66	6154.75	6712.61	7040.25	6932.12	6530.61	5791.27	4988.51	4292.85					
1329	4850.19	5476.84	6155.25	6714.39	7043.59	6937.01	6537.17	5799.60	4998.54	4304.55					
1330	4850.48	5477.05	6155.80	6716.23	7047.01	6941.95	6543.72	5807.79	5008.34	4315.97					
1331	4850.79	5477.33	6156.46	6718.21	7050.55	6946.97	6550.24	5815.78	5017.76	4326.97					
1332	4851.12	5477.69	6157.28	6720.37	7054.26	6952.09	6556.73	5823.51	5026.75	4337.44					
1333	4851.47	5478.18	6158.30	6722.74	7058.16	6957.31	6563.19	5830.99	5035.25	4347.30					
1334	4851.85	5478.82	6159.57	6725.37	7062.25	6962.63	6569.62	5838.21	5043.27	4356.50					
1335	4852.27	5479.63	6161.14	6728.27	7066.55	6968.06	6575.99	5845.17	5050.83	4365.03					
1336	4852.72	5480.64	6163.04	6731.47	7071.06	6973.58	6582.31	5851.90	5057.94	4372.87					
1337	4853.17	5481.85	6165.27	6734.95	7075.75	6979.18	6588.56	5858.40	5064.63	4380.00					
1338	4853.64	5483.25	6167.84	6738.72	7080.63	6984.84	6594.73	5864.67	5070.90	4386.44					
1339	4854.17	5484.87	6170.75	6742.77	7085.66	6990.54	6600.81	5870.71	5076.76	4392.18					
1340	4854.92	5486.78	6173.97	6747.06	7090.85	6996.28	6606.79	5876.52	5082.23	4397.19					
1341	4855.94	5489.00	6177.49	6751.59	7096.15	7002.02	6612.65	5882.12	5087.31	4401.50					
1342	4857.27	5491.54	6181.29	6756.31	7101.56	7007.76	6618.40	5887.49	5092.04	4405.21					
1343	4858.83	5494.29	6185.29	6761.17	7107.03	7013.49	6624.05	5892.70	5096.52	4408.54					
1344	4860.69	5497.33	6189.52	6766.20	7112.58	7019.20	6629.58	5897.70	5100.69	4411.45					
1345	4862.85	5500.63	6193.96	6771.36	7118.18	7024.87	6634.99	5902.49	5104.60	4414.01					
1346	4865.28	5504.17	6198.58	6776.64	7123.83	7030.50	6640.29	5907.12	5108.27	4416.29					
1347	4867.94	5507.90	6203.36	6782.01	7129.50	7036.11	6645.49	5911.59	5111.75	4418.36					
1348	4870.78	5511.79	6208.25	6787.46	7135.20	7041.69	6650.63	5915.95	5115.08	4420.26					
1349	4873.78	5515.81	6213.24	6792.96	7140.92	7047.24	6655.69	5920.21	5118.28	4422.04					

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1320	3760.971	3822.80	4206.93	4940.36	5756.21
1321	3770.060	3831.82	4215.53	4948.24	5763.27
1322	3780.015	3841.71	4224.90	4956.64	5770.57
1323	3790.764	3852.42	4235.01	4965.52	5778.10
1324	3802.217	3863.85	4245.76	4974.86	5785.87
1325	3814.260	3875.87	4257.06	4984.60	5793.86
1326	3826.752	3888.35	4268.78	4994.65	5802.02
1327	3839.525	3901.12	4280.76	5004.90	5810.31
1328	3852.395	3913.99	4292.83	5015.21	5818.64
1329	3865.168	3926.75	4304.81	5025.46	5826.93
1330	3877.663	3939.24	4316.52	5035.51	5835.10
1331	3889.716	3951.27	4327.83	5045.25	5843.09
1332	3901.194	3962.72	4338.61	5054.61	5850.86
1333	3911.988	3973.48	4348.76	5063.52	5858.41
1334	3922.016	3983.45	4358.20	5071.97	5865.73
1335	3931.218	3992.58	4366.90	5079.91	5872.82
1336	3939.556	4000.82	4374.80	5087.35	5879.69
1337	3946.988	4008.11	4381.87	5094.25	5886.34
1338	3953.502	4014.46	4388.08	5100.61	5892.76
1339	3959.095	4019.89	4393.50	5106.44	5898.93
1340	3963.737	4024.47	4398.28	5111.83	5904.86
1341	3967.489	4028.31	4402.51	5116.82	5910.54
1342	3970.465	4031.48	4406.25	5121.45	5915.97
1343	3972.991	4034.25	4409.67	5125.81	5921.23
1344	3975.015	4036.56	4412.70	5129.87	5926.26
1345	3976.489	4038.49	4415.40	5133.65	5931.09
1346	3977.973	4040.12	4417.82	5137.19	5935.73
1347	3979.070	4041.52	4420.02	5140.54	5940.22
1348	3980.003	4042.75	4422.04	5143.74	5944.60
1349	3980.807	4043.83	4423.92	5146.80	5948.86

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1320	5519.19	4891.83	4479.30	4524.67
1321	5519.79	4892.20	4479.68	4524.96
1322	5520.16	4892.46	4480.06	4525.26
1323	5520.39	4892.65	4480.42	4525.56
1324	5520.53	4892.80	4480.76	4525.87
1325	5520.65	4892.92	4481.08	4526.16
1326	5520.76	4893.05	4481.39	4526.45
1327	5520.90	4893.19	4481.70	4526.73
1328	5521.04	4893.33	4481.99	4527.00
1329	5521.17	4893.46	4482.29	4527.28
1330	5521.29	4893.59	4482.61	4527.57
1331	5521.40	4893.72	4482.93	4527.86
1332	5521.54	4893.86	4483.27	4528.16
1333	5521.76	4894.05	4483.63	4528.47
1334	5522.12	4894.30	4484.00	4528.77
1335	5522.69	4894.66	4484.38	4529.06
1336	5523.51	4895.14	4484.78	4529.35
1337	5524.62	4895.77	4485.18	4529.59
1338	5526.05	4896.54	4485.58	4529.81
1339	5527.80	4897.48	4485.98	4530.04
1340	5529.89	4898.53	4486.34	4530.33
1341	5532.29	4899.71	4486.70	4530.75
1342	5535.02	4901.06	4487.13	4531.36
1343	5537.96	4902.59	4487.69	4532.16
1344	5541.19	4904.38	4488.50	4533.23
1345	5544.69	4906.44	4489.58	4534.60
1346	5548.41	4908.77	4490.94	4536.26
1347	5552.33	4911.33	4492.56	4538.16
1348	5556.40	4914.08	4494.39	4540.27
1349	5560.61	4917.02	4496.43	4542.57

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1350	4876.84	5519.87	6218.26	6798.49	7146.64
1351	4879.85	5523.89	6223.25	6803.99	7152.36
1352	4882.74	5527.82	6228.17	6809.46	7158.07
1353	4885.47	5531.61	6232.99	6814.86	7163.75
1354	4887.99	5535.23	6237.87	6820.17	7169.41
1355	4890.25	5538.62	6242.19	6825.38	7175.03
1356	4892.22	5541.76	6246.50	6830.46	7180.60
1357	4893.89	5544.62	6250.58	6835.38	7186.10
1358	4895.24	5547.18	6254.40	6840.12	7191.52
1359	4896.29	5549.42	6257.95	6844.66	7196.83
1360	4897.05	5551.35	6261.20	6848.98	7202.02
1361	4897.60	5552.99	6264.12	6853.04	7207.07
1362	4898.07	5554.40	6266.71	6856.82	7211.95
1363	4898.52	5555.61	6268.95	6860.32	7216.65
1364	4898.97	5556.63	6270.86	6863.52	7221.16
1365	4899.38	5557.44	6272.42	6866.42	7225.46
1366	4899.77	5558.08	6273.68	6869.04	7229.55
1367	4900.12	5558.55	6274.68	6871.39	7233.43
1368	4900.44	5558.90	6275.47	6873.51	7237.10
1369	4900.74	5559.15	6276.09	6875.44	7240.61
1370	4901.03	5559.34	6276.60	6877.23	7243.97
1371	4901.30	5559.49	6277.05	6878.94	7247.23
1372	4901.57	5559.63	6277.48	6880.60	7250.45
1373	4901.84	5559.77	6277.91	6882.26	7253.69
1374	4902.12	5559.94	6278.38	6884.00	7256.99
1375	4902.41	5560.15	6278.94	6885.85	7260.41
1376	4902.72	5560.45	6279.63	6887.87	7263.99
1377	4903.06	5560.85	6280.51	6890.10	7267.77
1378	4903.42	5561.40	6281.64	6892.58	7271.75
1379	4903.82	5562.13	6283.07	6895.35	7275.95

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
1350	3981.575	4044.87	4425.76	5149.83	5953.10
1351	3982.381	4045.95	4427.64	5152.90	5957.37
1352	3983.270	4047.13	4429.61	5156.05	5961.70
1353	3984.298	4048.45	4431.74	5159.33	5966.15
1354	3985.533	4049.99	4434.07	5162.80	5970.73
1355	3987.042	4051.81	4436.66	5166.49	5975.49
1356	3988.912	4053.97	4439.57	5170.44	5980.44
1357	3991.247	4056.56	4442.84	5174.69	5985.62
1358	3994.167	4059.69	4446.55	5179.29	5991.03
1359	3997.852	4063.46	4450.73	5184.25	5996.69
1360	4002.425	4067.99	4455.47	5189.61	6002.60
1361	4007.962	4073.37	4460.84	5195.41	6008.76
1362	4014.428	4079.66	4467.02	5201.74	6015.16
1363	4021.828	4086.93	4474.05	5208.62	6021.80
1364	4030.148	4095.15	4481.94	5216.05	6028.67
1365	4039.358	4104.29	4490.64	5224.00	6035.77
1366	4049.421	4114.29	4500.12	5232.46	6043.09
1367	4060.281	4125.12	4510.33	5241.42	6050.66
1368	4071.864	4136.67	4521.20	5250.85	6058.48
1369	4084.071	4148.87	4532.65	5260.70	6066.53
1370	4096.773	4161.56	4544.56	5270.89	6074.78
1371	4109.793	4174.58	4556.77	5281.32	6083.18
1372	4122.970	4187.75	4569.13	5291.86	6091.65
1373	4136.109	4200.89	4581.45	5302.37	6100.11
1374	4149.013	4213.79	4593.56	5312.71	6108.45
1375	4161.503	4226.27	4605.27	5322.76	6116.62
1376	4173.427	4238.17	4616.46	5332.41	6124.56
1377	4184.665	4249.38	4627.01	5341.61	6132.25
1378	4195.123	4259.79	4636.85	5350.32	6139.69
1379	4204.728	4269.33	4645.91	5358.50	6146.89

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CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11	LONGERON 11	ROW 12	LONGERON 12	EARTH END	SPACE END
1350	5564.86	4920.00	4498.53	4544.93	2868.54	9336.23
1351	5569.07	4922.94	4500.56	4547.23	2870.74	9343.82
1352	5573.19	4925.75	4502.46	4549.40	2872.95	9351.42
1353	5577.17	4928.39	4504.16	4551.39	2875.15	9359.04
1354	5580.97	4930.80	4505.62	4553.14	2877.36	9366.66
1355	5584.56	4932.96	4506.81	4554.61	2879.56	9374.27
1356	5587.89	4934.85	4507.71	4555.80	2881.77	9381.88
1357	5590.94	4936.47	4508.36	4556.69	2883.97	9389.45
1358	5593.68	4937.84	4508.80	4557.32	2886.16	9396.96
1359	5596.11	4939.04	4509.16	4557.75	2888.34	9404.39
1360	5598.22	4940.10	4509.52	4558.05	2890.50	9411.70
1361	5600.00	4941.04	4509.92	4558.28	2892.64	9418.87
1362	5601.45	4941.82	4510.32	4558.50	2894.76	9425.85
1363	5602.57	4942.45	4510.72	4558.74	2896.85	9432.62
1364	5603.40	4942.94	4511.11	4559.03	2898.92	9439.15
1365	5603.96	4943.29	4511.50	4559.32	2900.96	9445.41
1366	5604.31	4943.55	4511.87	4559.62	2902.97	9451.41
1367	5604.52	4943.73	4512.22	4559.93	2904.96	9457.13
1368	5604.65	4943.87	4512.56	4560.22	2906.94	9462.58
1369	5604.76	4943.99	4512.88	4560.52	2908.90	9467.80
1370	5604.89	4944.13	4513.19	4560.80	2910.87	9472.83
1371	5605.05	4944.27	4513.48	4561.07	2912.83	9477.74
1372	5605.22	4944.42	4513.77	4561.34	2914.79	9482.58
1373	5605.39	4944.57	4514.05	4561.61	2916.75	9487.44
1374	5605.53	4944.71	4514.35	4561.89	2918.71	9492.39
1375	5605.65	4944.84	4514.66	4562.18	2920.67	9497.50
1376	5605.76	4944.97	4514.99	4562.47	2922.64	9502.83
1377	5605.93	4945.12	4515.34	4562.78	2924.62	9508.41
1378	5606.20	4945.34	4515.70	4563.08	2926.63	9514.27
1379	5606.66	4945.64	4516.08	4563.38	2928.65	9520.42

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CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1380	4904.26	5563.06	6284.82	6898.42	7280.37
1381	4904.71	5564.20	6286.94	6901.81	7285.00
1382	4905.17	5565.54	6289.42	6905.50	7289.83
1383	4905.69	5567.12	6292.26	6909.49	7294.84
1384	4906.41	5569.00	6295.45	6913.76	7300.00
1385	4907.43	5571.22	6298.97	6918.29	7305.31
1386	4908.81	5573.80	6302.81	6923.04	7310.73
1387	4910.55	5576.73	6306.95	6928.00	7316.25
1388	4912.66	5579.99	6311.36	6933.15	7321.85
1389	4915.15	5583.58	6316.03	6938.45	7327.50
1390	4917.98	5587.46	6320.91	6943.89	7333.20
1391	4921.13	5591.59	6325.98	6949.45	7338.93
1392	4924.56	5595.95	6331.22	6955.09	7344.68
1393	4928.22	5600.49	6336.57	6960.80	7350.45
1394	4932.04	5605.16	6342.02	6966.56	7356.22
1395	4935.95	5609.89	6347.50	6972.35	7362.00
1396	4939.90	5614.66	6353.01	6978.14	7367.77
1397	4943.83	5619.40	6358.51	6983.93	7373.55
1398	4947.66	5624.08	6363.95	6989.69	7379.33
1399	4951.33	5628.63	6369.32	6995.41	7385.09
1400	4954.78	5633.00	6374.56	7001.06	7390.85
1401	4957.96	5637.16	6379.65	7006.63	7396.58
1402	4960.83	5641.08	6384.56	7012.08	7402.28
1403	4963.37	5644.71	6389.26	7017.41	7407.94
1404	4965.57	5648.04	6393.73	7022.59	7413.55
1405	4967.40	5651.06	6397.94	7027.60	7419.09
1406	4968.89	5653.75	6401.88	7032.42	7424.55
1407	4970.05	5656.11	6405.53	7037.04	7429.90
1408	4970.91	5658.16	6408.89	7041.44	7435.14
1409	4971.54	5659.91	6411.94	7045.60	7440.25

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
1380	4213.427	4277.94	4654.15	5366.15	6153.86
1381	4221.179	4285.57	4661.51	5373.25	6160.59
1382	4227.950	4292.18	4667.96	5379.75	6167.07
1383	4233.725	4297.79	4673.53	5385.69	6173.29
1384	4238.464	4302.46	4678.38	5391.12	6179.25
1385	4242.212	4306.29	4682.60	5396.11	6184.92
1386	4245.091	4309.37	4686.28	5400.68	6190.32
1387	4247.305	4311.86	4689.46	5404.86	6195.44
1388	4248.986	4313.84	4692.20	5408.68	6200.29
1389	4250.253	4315.41	4694.56	5412.17	6204.90
1390	4251.194	4316.64	4696.60	5415.37	6209.28
1391	4251.900	4317.61	4698.36	5418.33	6213.46
1392	4252.448	4318.39	4699.90	5421.08	6217.46
1393	4252.895	4319.04	4701.28	5423.68	6221.33
1394	4253.297	4319.60	4702.54	5426.16	6225.10
1395	4253.685	4320.13	4703.75	5428.58	6228.82
1396	4254.067	4320.65	4704.93	5430.98	6232.52
1397	4254.452	4321.17	4706.13	5433.39	6236.23
1398	4254.862	4321.73	4707.39	5435.87	6239.99
1399	4255.294	4322.37	4708.76	5438.45	6243.85
1400	4255.832	4323.13	4710.29	5441.19	6247.85
1401	4256.520	4324.08	4712.02	5444.13	6252.01
1402	4257.426	4325.28	4714.02	5447.30	6256.36
1403	4258.633	4326.79	4716.32	5450.74	6260.93
1404	4260.223	4328.68	4718.99	5454.49	6285.73
1405	4262.289	4331.03	4722.05	5458.57	6270.78
1406	4264.940	4333.91	4725.56	5463.01	6276.09
1407	4268.322	4337.43	4729.56	5467.83	6281.65
1408	4272.560	4341.67	4734.09	5473.04	6287.47
1409	4277.705	4346.70	4739.19	5478.66	6293.53

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1380	5607.37	4946.07	4516.47	4563.66
1381	5608.38	4946.64	4516.87	4563.93
1382	5609.71	4947.38	4517.27	4564.15
1383	5611.41	4948.28	4517.67	4564.37
1384	5613.46	4949.32	4518.04	4564.65
1385	5615.86	4950.50	4518.39	4565.08
1386	5618.63	4951.88	4518.85	4565.72
1387	5621.75	4953.57	4519.55	4566.68
1388	5625.21	4955.59	4520.59	4568.01
1389	5628.98	4957.98	4522.01	4569.72
1390	5633.05	4960.72	4523.84	4571.82
1391	5637.37	4963.81	4526.05	4574.29
1392	5641.92	4967.21	4528.65	4577.10
1393	5646.64	4970.88	4531.56	4580.20
1394	5651.48	4974.75	4534.72	4583.51
1395	5656.39	4978.73	4538.01	4586.94
1396	5661.34	4982.76	4541.38	4590.42
1397	5666.26	4986.76	4544.71	4593.88
1398	5671.12	4990.65	4547.89	4597.20
1399	5675.85	4994.33	4550.82	4600.31
1400	5680.41	4997.75	4553.43	4603.15
1401	5684.75	5000.88	4555.69	4606.65
1402	5688.86	5003.66	4557.56	4607.80
1403	5692.68	5006.11	4559.05	4609.58
1404	5696.20	5008.20	4560.17	4610.98
1405	5699.41	5009.97	4560.95	4612.03
1406	5702.29	5011.44	4561.47	4612.77
1407	5704.84	5012.70	4561.85	4613.27
1408	5707.07	5013.80	4562.20	4613.61
1409	5708.98	5014.79	4562.58	4613.86

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1410	4972.03	5661.43	6414.69	7049.52	7445.21
1411	4972.49	5662.75	6417.15	7053.20	7450.03
1412	4972.94	5663.92	6419.32	7056.63	7454.69
1413	4973.39	5664.95	6421.24	7059.84	7459.21
1414	4973.82	5665.84	6422.93	7062.85	7463.58
1415	4974.23	5666.62	6424.43	7065.70	7467.84
1416	4974.62	5667.32	6425.81	7068.42	7472.01
1417	4975.01	5667.97	6427.10	7071.07	7476.12
1418	4975.39	5668.60	6428.37	7073.69	7480.21
1419	4975.77	5669.25	6429.66	7076.33	7484.32
1420	4976.17	5669.95	6431.03	7079.05	7488.49
1421	4976.58	5670.73	6432.54	7081.90	7492.75
1422	4977.00	5671.62	6434.24	7084.92	7497.13
1423	4977.46	5672.66	6436.17	7088.14	7501.66
1424	4977.91	5673.85	6438.38	7091.61	7506.34
1425	4978.37	5675.21	6440.90	7095.34	7511.19
1426	4978.89	5676.79	6443.74	7099.33	7516.20
1427	4979.60	5678.66	6446.92	7103.59	7521.36
1428	4980.62	5680.87	6450.44	7108.11	7526.66
1429	4982.01	5683.47	6454.30	7112.88	7532.09
1430	4983.83	5686.47	6458.50	7117.88	7537.63
1431	4986.11	5689.88	6463.02	7123.10	7543.25
1432	4988.88	5693.71	6467.87	7128.51	7548.94
1433	4992.16	5697.95	6473.01	7134.11	7554.68
1434	4995.96	5702.60	6478.44	7139.86	7560.45
1435	5000.28	5707.63	6484.13	7145.75	7566.24
1436	5005.13	5713.05	6490.05	7151.74	7572.02
1437	5010.71	5718.97	6496.24	7157.85	7577.77
1438	5016.82	5725.24	6502.58	7164.01	7583.51
1439	5023.37	5731.78	6509.05	7170.22	7589.22

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
1410	4283.725	4352.55	4744.97	5484.74	6299.82
1411	4290.559	4359.22	4751.48	5491.28	6306.31
1412	4298.154	4366.69	4758.69	5498.27	6313.00
1413	4306.437	4374.87	4766.56	5505.68	6319.87
1414	4315.317	4383.67	4774.96	5513.44	6326.88
1415	4324.689	4392.97	4783.81	5521.49	6334.01
1416	4334.430	4402.65	4792.99	5529.75	6341.25
1417	4344.402	4412.57	4802.38	5538.16	6348.55
1418	4354.452	4422.56	4811.85	5546.61	6355.87
1419	4364.426	4432.48	4821.25	5555.02	6363.18
1420	4374.172	4442.16	4830.43	5563.29	6370.41
1421	4383.541	4451.46	4839.28	5571.34	6377.55
1422	4392.403	4460.24	4847.66	5579.08	6384.56
1423	4400.634	4468.37	4855.48	5586.46	6391.40
1424	4408.129	4475.73	4862.60	5593.40	6398.07
1425	4414.796	4482.24	4868.95	5599.84	6404.52
1426	4420.566	4487.84	4874.52	5605.78	6410.75
1427	4425.340	4492.54	4879.38	5611.23	6416.71
1428	4429.103	4496.38	4883.62	5616.22	6422.39
1429	4431.938	4499.43	4887.26	5620.77	6427.77
1430	4434.031	4501.80	4890.35	5624.87	6432.83
1431	4435.518	4503.59	4892.92	5628.54	6437.58
1432	4436.512	4504.88	4895.01	5631.79	6442.00
1433	4437.141	4505.76	4896.67	5634.65	6446.09
1434	4437.547	4506.34	4897.95	5637.15	6449.88
1435	4437.903	4506.72	4898.91	5639.32	6453.36
1436	4438.271	4507.00	4899.61	5641.19	6456.56
1437	4438.674	4507.22	4900.13	5642.77	6459.41
1438	4439.076	4507.44	4900.60	5644.20	6462.03
1439	4439.476	4507.66	4901.05	5645.52	6464.47

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CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1410	5710.58	5015.65	4562.99	4614.08
1411	5711.90	5016.37	4563.39	4614.30
1412	5712.96	5016.97	4563.78	4614.56
1413	5713.79	5017.46	4564.18	4614.84
1414	5714.45	5017.86	4564.57	4615.13
1415	5714.97	5018.20	4564.95	4615.43
1416	5715.39	5018.48	4565.33	4615.73
1417	5715.76	5018.75	4565.70	4616.03
1418	5716.12	5019.00	4566.07	4616.33
1419	5716.49	5019.26	4566.44	4616.63
1420	5716.91	5019.55	4566.82	4616.93
1421	5717.43	5019.88	4567.20	4617.23
1422	5718.09	5020.29	4567.59	4617.52
1423	5718.95	5020.78	4567.98	4617.80
1424	5720.04	5021.40	4568.38	4618.05
1425	5721.41	5022.15	4568.78	4618.27
1426	5723.11	5023.05	4569.18	4618.49
1427	5725.14	5024.09	4569.55	4618.77
1428	5727.55	5025.27	4569.91	4619.19
1429	5730.34	5026.67	4570.37	4619.85
1430	5733.52	5028.42	4571.14	4620.88
1431	5737.12	5030.60	4572.35	4622.38
1432	5741.14	5033.28	4574.09	4624.41
1433	5745.56	5036.51	4576.48	4627.03
1434	5750.39	5040.35	4579.60	4630.31
1435	5755.61	5044.86	4583.57	4634.30
1436	5761.18	5050.02	4588.39	4639.02
1437	5767.19	5055.97	4594.23	4644.66
1438	5773.47	5062.37	4600.68	4650.92
1439	5779.97	5069.16	4607.61	4657.67

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON	ROW 2 LONGERON	ROW 3 LONGERON	ROW 4 LONGERON	ROW 5 LONGERON
1440	5030.25	5738.54	6515.60	7176.46	7594.91
1441	5037.35	5745.44	6522.22	7182.71	7600.59
1442	5044.53	5752.39	6528.85	7188.97	7606.26
1443	5051.66	5759.30	6535.47	7195.23	7611.94
1444	5058.61	5766.10	6542.04	7201.47	7617.63
1445	5065.25	5772.71	6548.54	7207.68	7623.33
1446	5071.49	5779.06	6554.91	7213.86	7629.06
1447	5077.25	5785.09	6561.15	7219.99	7634.81
1448	5082.49	5790.78	6567.23	7226.05	7640.58
1449	5087.23	5796.13	6573.10	7232.02	7646.36
1450	5091.48	5801.12	6578.76	7237.89	7652.14
1451	5095.27	5805.75	6584.18	7243.64	7657.92
1452	5098.58	5810.02	6589.35	7249.25	7663.66
1453	5101.45	5813.93	6594.26	7254.71	7669.36
1454	5103.91	5817.49	6598.90	7260.00	7675.01
1455	5105.97	5820.71	6603.28	7265.12	7680.60
1456	5107.69	5823.61	6607.40	7270.07	7686.11
1457	5109.10	5826.23	6611.27	7274.84	7691.54
1458	5110.24	5828.57	6614.91	7279.45	7696.89
1459	5111.17	5830.69	6618.33	7283.90	7702.16
1460	5111.94	5832.63	6621.58	7288.22	7707.35
1461	5112.59	5834.42	6624.68	7292.41	7712.48
1462	5113.17	5836.11	6627.67	7296.52	7717.56
1463	5113.71	5837.75	6630.59	7300.58	7722.60
1464	5114.25	5839.37	6633.49	7304.62	7727.63
1465	5114.79	5841.00	6636.41	7308.68	7732.68
1466	5115.38	5842.70	6639.41	7312.80	7737.76
1467	5116.09	5844.57	6642.58	7317.06	7742.92
1468	5116.94	5846.61	6645.93	7321.45	7748.16
1469	5118.00	5848.86	6649.49	7325.99	7753.47

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
1440	4439.875	4507.91	4901.51	5646.76	6466.78
1441	4440.273	4508.16	4901.96	5647.96	6469.01
1442	4440.671	4508.41	4902.41	5649.13	6471.20
1443	4441.069	4508.66	4902.87	5650.32	6473.41
1444	4441.467	4508.91	4903.32	5651.55	6475.70
1445	4441.867	4509.14	4903.77	5652.85	6478.10
1446	4442.268	4509.36	4904.24	5654.25	6480.67
1447	4442.671	4509.57	4904.73	5655.77	6483.44
1448	4443.066	4509.81	4905.31	5657.47	6486.44
1449	4443.429	4510.10	4906.06	5659.39	6489.69
1450	4443.786	4510.51	4907.05	5661.60	6493.21
1451	4444.196	4511.09	4908.35	5664.11	6497.01
1452	4444.804	4511.95	4909.98	5666.94	6501.09
1453	4445.712	4513.14	4911.97	5670.11	6505.44
1454	4447.011	4514.75	4914.37	5673.63	6510.06
1455	4448.757	4516.79	4917.17	5677.50	6514.96
1456	4451.012	4519.31	4920.38	5681.70	6520.10
1457	4453.823	4522.34	4924.01	5686.24	6525.47
1458	4457.245	4525.90	4928.03	5691.07	6531.04
1459	4461.270	4529.96	4932.43	5696.19	6536.80
1460	4465.838	4534.48	4937.16	5701.54	6542.71
1461	4470.854	4539.39	4942.18	5707.11	6548.73
1462	4476.203	4544.60	4947.43	5712.82	6554.85
1463	4481.755	4549.98	4952.81	5718.64	6561.01
1464	4487.368	4555.43	4958.25	5724.48	6567.19
1465	4492.910	4560.81	4963.63	5730.29	6573.36
1466	4498.235	4565.99	4968.86	5736.00	6579.46
1467	4503.017	4570.70	4973.73	5741.45	6585.43
1468	4507.278	4574.96	4978.27	5746.67	6591.25
1469	4510.934	4578.71	4982.44	5751.62	6596.90

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1440	5786.64	5076.21	4614.91	4664.80
1441	5793.41	5083.45	4622.43	4672.16
1442	5800.22	5090.74	4630.04	4679.62
1443	5807.01	5098.00	4637.60	4687.02
1444	5813.70	5105.11	4644.96	4694.21
1445	5820.25	5111.97	4651.99	4701.07
1446	5826.59	5118.49	4658.59	4707.48
1447	5832.70	5124.59	4664.64	4713.33
1448	5838.52	5130.20	4670.04	4718.55
1449	5844.02	5135.24	4674.69	4723.13
1450	5849.19	5139.86	4678.56	4727.03
1451	5854.00	5143.48	4681.65	4730.29
1452	5858.46	5146.75	4684.09	4732.95
1453	5862.56	5149.54	4685.96	4735.10
1454	5866.31	5151.89	4687.35	4736.78
1455	5869.72	5153.87	4688.34	4738.06
1456	5872.81	5155.53	4689.02	4738.99
1457	5875.61	5156.94	4689.49	4739.67
1458	5878.15	5158.19	4689.87	4740.16
1459	5880.45	5159.32	4690.22	4740.53
1460	5882.56	5160.38	4690.58	4740.83
1461	5884.52	5161.38	4690.96	4741.09
1462	5886.36	5162.35	4691.35	4741.32
1463	5888.13	5163.29	4691.75	4741.55
1464	5889.88	5164.22	4692.16	4741.77
1465	5891.66	5165.16	4692.56	4742.00
1466	5893.51	5166.13	4692.95	4742.23
1467	5895.54	5167.18	4693.32	4742.51
1468	5897.76	5168.26	4693.67	4742.85
1469	5900.21	5169.46	4694.03	4743.29

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CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1470	5851.39	6653.28	7330.71	7758.88	7707.04
1471	5854.21	6657.33	7335.62	7764.37	7712.77
1472	5857.37	6661.66	7340.70	7769.94	7718.45
1473	5860.90	6666.28	7345.98	7775.59	7724.09
1474	5864.82	6671.20	7351.44	7781.29	7729.66
1475	5869.17	6676.42	7357.08	7787.04	7735.15
1476	5873.94	6681.93	7362.88	7792.82	7740.52
1477	5879.18	6687.74	7368.82	7798.60	7745.77
1478	5884.90	6693.83	7374.89	7804.37	7750.86
1479	5891.16	6700.17	7381.06	7810.11	7755.79
1480	5897.99	6706.76	7387.30	7815.79	7760.53
1481	5905.35	6713.57	7393.61	7821.41	7765.09
1482	5913.19	6720.58	7399.97	7826.98	7769.46
1483	5921.48	6727.78	7406.37	7832.43	7773.64
1484	5930.09	6735.17	7412.81	7837.82	7777.67
1485	5939.16	6742.73	7419.29	7843.15	7781.55
1486	5948.41	6750.41	7425.81	7848.43	7785.32
1487	5957.80	6758.17	7432.34	7853.68	7789.04
1488	5967.23	6765.95	7438.88	7858.92	7792.73
1489	5976.59	6773.69	7445.41	7864.18	7796.46
1490	5985.75	6781.33	7451.91	7869.47	7800.28
1491	5994.64	6788.82	7458.38	7874.82	7804.21
1492	6003.19	6796.15	7464.81	7880.24	7808.28
1493	6011.34	6803.30	7471.20	7885.74	7812.53
1494	6019.06	6810.28	7477.54	7891.30	7816.95
1495	6026.32	6817.02	7483.84	7896.94	7821.54
1496	6033.06	6823.57	7490.07	7902.63	7826.31
1497	6039.30	6829.90	7496.23	7908.37	7831.25
1498	6045.04	6836.00	7502.31	7914.13	7836.33
1499	6050.35	6841.86	7508.27	7919.92	7841.55

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1470	4513.935	4581.91	4986.20	5756.25	6602.34
1471	4516.334	4584.56	4989.52	5760.55	6607.55
1472	4518.171	4586.69	4992.40	5764.48	6612.48
1473	4519.507	4588.33	4994.83	5768.03	6617.13
1474	4520.403	4589.52	4996.81	5771.18	6621.48
1475	4520.962	4590.31	4998.37	5773.95	6625.50
1476	4521.341	4590.82	4999.54	5776.34	6629.18
1477	4521.698	4591.14	5000.36	5778.35	6632.51
1478	4522.096	4591.37	5000.92	5780.02	6635.50
1479	4522.498	4591.59	5001.39	5781.45	6638.12
1480	4522.896	4591.83	5001.85	5782.67	6640.38
1481	4523.290	4592.11	5002.30	5783.70	6642.32
1482	4523.675	4592.41	5002.71	5784.55	6643.93
1483	4524.050	4592.71	5003.10	5785.23	6645.28
1484	4524.413	4593.01	5003.47	5785.77	6646.41
1485	4524.765	4593.31	5003.81	5786.22	6647.36
1486	4525.108	4593.61	5004.14	5786.60	6648.21
1487	4525.446	4593.91	5004.47	5786.94	6648.99
1488	4525.781	4594.21	5004.79	5787.28	6649.76
1489	4526.120	4594.51	5005.11	5787.63	6650.56
1490	4526.467	4594.81	5005.45	5788.03	6651.44
1491	4526.823	4595.11	5005.80	5788.51	6652.46
1492	4527.190	4595.41	5006.18	5789.10	6653.65
1493	4527.568	4595.71	5006.57	5789.83	6655.08
1494	4527.956	4596.00	5007.00	5790.72	6656.78
1495	4528.351	4596.28	5007.46	5791.79	6658.78
1496	4528.750	4596.52	5007.91	5793.04	6661.09
1497	4529.152	4596.73	5008.38	5794.48	6663.73
1498	4529.552	4596.96	5008.94	5796.14	6666.70
1499	4529.913	4597.26	5009.71	5798.10	6669.98

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1470	5902.92	5170.80	4694.45	4743.89
1471	5905.93	5172.39	4695.07	4744.75
1472	5909.28	5174.30	4696.00	4745.96
1473	5913.00	5176.62	4697.35	4747.60
1474	5917.11	5179.43	4699.24	4749.76
1475	5921.64	5182.80	4701.80	4752.54
1476	5926.60	5186.86	4705.20	4756.06
1477	5932.00	5191.71	4709.60	4760.42
1478	5937.84	5197.36	4715.07	4765.70
1479	5944.13	5203.78	4721.52	4771.96
1480	5950.84	5210.92	4728.93	4779.20
1481	5957.99	5218.76	4737.23	4787.38
1482	5965.55	5227.24	4746.35	4796.40
1483	5973.52	5236.33	4756.21	4806.18
1484	5981.88	5245.96	4766.72	4816.62
1485	5990.58	5256.05	4777.74	4827.58
1486	5999.55	5266.47	4789.14	4838.94
1487	6008.69	5277.09	4800.76	4850.51
1488	6017.86	5287.76	4812.43	4862.14
1489	6026.94	5298.32	4823.99	4873.65
1490	6035.82	5308.62	4835.26	4884.87
1491	6044.41	5318.55	4846.10	4895.65
1492	6052.63	5328.00	4856.40	4905.87
1493	6060.48	5336.91	4866.04	4915.43
1494	6067.93	5345.23	4874.95	4924.23
1495	6074.99	5352.93	4883.07	4932.23
1496	6081.64	5359.97	4890.35	4939.33
1497	6087.90	5366.34	4896.75	4945.54
1498	6093.77	5372.03	4902.26	4950.86
1499	6099.24	5377.01	4906.83	4955.37

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1500	5330.20	6055.26	6847.46	7514.12	7925.70
1501	5333.87	6059.81	6852.82	7519.83	7931.46
1502	5337.42	6064.27	6858.12	7525.51	7937.22
1503	5340.54	6068.39	6863.18	7531.06	7942.95
1504	5343.30	6072.20	6868.02	7536.47	7948.64
1505	5345.74	6075.75	6872.65	7541.76	7954.29
1506	5347.91	6079.06	6877.10	7546.93	7959.89
1507	5349.86	6082.18	6881.40	7551.99	7965.46
1508	5351.65	6085.15	6885.57	7556.98	7970.98
1509	5353.32	6088.01	6889.66	7561.90	7976.49
1510	5354.93	6090.81	6893.69	7566.79	7981.97
1511	5356.54	6093.62	6897.73	7571.69	7987.46
1512	5358.26	6096.53	6901.86	7576.64	7992.98
1513	5360.12	6099.57	6906.08	7581.66	7998.52
1514	5362.17	6102.78	6910.45	7586.77	8004.10
1515	5364.47	6106.20	6914.99	7592.00	8009.73
1516	5367.07	6109.88	6919.73	7597.35	8015.40
1517	5370.02	6113.86	6924.68	7602.83	8021.11
1518	5373.38	6118.17	6929.88	7608.46	8026.86
1519	5377.21	6122.84	6935.33	7614.22	8032.63
1520	5381.57	6127.90	6941.03	7620.11	8038.41
1521	5386.52	6133.40	6946.99	7626.13	8044.19
1522	5392.21	6139.39	6953.21	7632.25	8049.94
1523	5398.75	6145.93	6959.67	7638.45	8055.66
1524	5406.19	6153.04	6966.38	7644.73	8061.31
1525	5414.48	6160.70	6973.31	7651.07	8066.89
1526	5423.59	6168.89	6980.47	7657.46	8072.37
1527	5433.49	6177.61	6987.89	7663.91	8077.76
1528	5444.12	6186.84	6995.56	7670.42	8083.04
1529	5455.42	6196.54	7003.49	7677.00	8088.23

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
1500	4530.275	4597.70	5010.76	5800.36	6673.56
1501	4530.719	4598.34	5012.14	5802.95	6677.42
1502	4531.211	4599.05	5013.59	5805.62	6681.35
1503	4531.932	4600.04	5015.37	5808.59	6685.54
1504	4532.937	4601.34	5017.47	5811.86	6689.97
1505	4534.252	4602.96	5019.88	5815.39	6694.61
1506	4535.870	4604.88	5022.57	5819.16	6699.43
1507	4537.771	4607.07	5025.50	5823.13	6704.40
1508	4539.913	4609.49	5028.62	5827.27	6709.49
1509	4542.239	4612.08	5031.89	5831.51	6714.66
1510	4544.672	4614.76	5035.24	5835.83	6719.88
1511	4547.096	4617.44	5038.58	5840.14	6725.09
1512	4549.343	4619.96	5041.79	5844.34	6730.23
1513	4551.376	4622.27	5044.83	5848.40	6735.26
1514	4553.140	4624.33	5047.64	5852.27	6740.16
1515	4554.606	4626.11	5050.19	5855.93	6744.89
1516	4555.757	4627.56	5052.44	5859.32	6749.42
1517	4556.602	4628.69	5054.37	5862.43	6753.72
1518	4557.184	4629.51	5055.96	5865.23	6757.77
1519	4557.585	4630.07	5057.22	5867.71	6761.54
1520	4557.939	4630.45	5058.16	5869.85	6765.00
1521	4558.315	4630.71	5058.83	5871.68	6768.14
1522	4558.718	4630.93	5059.33	5873.22	6770.94
1523	4559.118	4631.16	5059.79	5874.54	6773.39
1524	4559.514	4631.42	5060.24	5875.67	6775.48
1525	4559.903	4631.71	5060.67	5876.58	6777.22
1526	4560.280	4632.01	5061.07	5877.29	6778.62
1527	4560.642	4632.31	5061.43	5877.82	6779.72
1528	4560.986	4632.61	5061.77	5878.21	6780.58
1529	4561.310	4632.91	5062.07	5878.48	6781.24

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1500	6104.33	5381.30	4910.53	4959.13
1501	6109.06	5384.98	4913.45	4962.24
1502	6113.70	5388.52	4916.21	4965.20
1503	6118.01	5391.58	4918.40	4967.64
1504	6122.01	5394.25	4920.13	4969.65
1505	6125.74	5396.59	4921.50	4971.32
1506	6129.25	5398.66	4922.60	4972.70
1507	6132.56	5400.53	4923.48	4973.86
1508	6135.72	5402.25	4924.22	4974.86
1509	6138.77	5403.88	4924.87	4975.76
1510	6141.77	5405.45	4925.48	4976.60
1511	6144.76	5407.02	4926.08	4977.45
1512	6147.86	5408.69	4926.77	4978.39
1513	6151.09	5410.47	4927.57	4979.46
1514	6154.49	5412.44	4928.55	4980.72
1515	6158.10	5414.64	4929.77	4982.24
1516	6161.98	5417.14	4931.33	4984.08
1517	6166.14	5420.01	4933.29	4986.31
1518	6170.63	5423.34	4935.79	4989.04
1519	6175.49	5427.22	4938.97	4992.36
1520	6180.72	5431.77	4942.99	4996.40
1521	6186.37	5437.06	4947.98	5001.26
1522	6192.43	5443.10	4953.94	5007.03
1523	6198.93	5449.87	4960.86	5013.77
1524	6205.87	5457.38	4968.74	5021.51
1525	6213.27	5465.62	4977.56	5030.21
1526	6221.15	5474.58	4987.27	5039.84
1527	6229.55	5484.27	4997.83	5050.34
1528	6238.50	5494.66	5009.20	5061.65
1529	6247.99	5505.71	5021.28	5073.70

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW	1 LONGERON	1	ROW	2 LONGERON	2	ROW	3 LONGERON	3	ROW	4 LONGERON	4	ROW	5 LONGERON	5
1530	5467.18	6206.60		7011.63	7683.64		8093.34	8002.03	7571.37	6747.63	5845.78		5060.27		
1531	5479.41	6217.01	7019.99	7690.34	8098.38	8005.31	7573.13	6748.38	5845.95	5060.42					
1532	5491.95	6227.67	7028.51	7697.08	8103.37	8008.48	7574.79	6749.11	5846.15	5060.59					
1533	5504.62	6238.43	7037.09	7703.85	8108.34	8011.61	7576.40	6749.82	5846.37	5060.76					
1534	5517.23	6249.14	7045.64	7710.61	8113.32	8014.76	7578.02	6750.54	5846.59	5060.93					
1535	5529.59	6259.66	7054.07	7717.33	8118.34	8017.99	7579.74	6751.28	5846.77	5061.08					
1536	5541.55	6269.86	7062.30	7723.99	8123.43	8021.35	7581.60	6752.06	5846.90	5061.22					
1537	5552.96	6279.66	7070.28	7730.58	8128.59	8024.89	7583.66	6752.93	5847.02	5061.35					
1538	5563.73	6288.98	7078.01	7737.11	8133.86	8028.64	7585.95	6753.93	5847.16	5061.50					
1539	5573.78	6297.80	7085.47	7743.57	8139.22	8032.60	7588.50	6755.12	5847.39	5061.69					
1540	5583.06	6306.10	7092.68	7749.97	8144.69	8036.78	7591.33	6756.54	5847.78	5061.96					
1541	5591.52	6313.87	7099.66	7756.32	8150.25	8041.18	7594.45	6758.24	5848.40	5062.35					
1542	5599.15	6321.11	7106.42	7762.61	8155.89	8045.78	7597.85	6760.27	5849.30	5062.87					
1543	5605.89	6327.77	7112.93	7768.84	8161.59	8050.58	7601.55	6762.62	5850.51	5063.54					
1544	5611.76	6333.88	7119.21	7774.98	8167.33	8055.55	7605.51	6765.32	5852.05	5064.37					
1545	5616.87	6339.48	7125.23	7781.02	8173.10	8060.68	7609.73	6768.35	5853.92	5065.35					
1546	5621.37	6344.65	7131.00	7786.94	8178.89	8065.95	7614.20	6771.72	5856.13	5066.45					
1547	5625.32	6349.42	7136.51	7792.74	8184.67	8071.33	7618.88	6775.39	5858.67	5067.69					
1548	5628.81	6353.83	7141.77	7798.40	8190.42	8076.80	7623.75	6779.36	5861.52	5069.15					
1549	5631.88	6357.90	7146.80	7803.93	8196.15	8082.34	7628.79	6783.57	5864.68	5070.88					
1550	5634.59	6361.67	7151.61	7809.32	8201.83	8087.94	7633.98	6788.02	5868.12	5072.90					
1551	5636.99	6365.19	7156.22	7814.59	8207.47	8093.58	7639.29	6792.65	5871.81	5075.21					
1552	5639.14	6368.49	7160.65	7819.75	8213.07	8099.25	7644.70	6797.46	5875.72	5077.78					
1553	5641.10	6371.60	7164.95	7824.82	8218.63	8104.94	7650.19	6802.39	5879.81	5080.57					
1554	5642.90	6374.59	7169.14	7829.81	8224.17	8110.65	7655.74	6807.43	5884.04	5083.56					
1555	5644.62	6377.50	7173.26	7834.76	8229.68	8116.36	7661.33	6812.53	5888.36	5086.66					
1556	5646.29	6380.36	7177.34	7839.69	8235.18	8122.08	7666.94	6817.66	5892.73	5089.83					
1557	5647.97	6383.23	7181.44	7844.62	8240.69	8127.80	7672.54	6822.78	5897.08	5092.98					
1558	5649.71	6386.16	7185.58	7849.58	8246.21	8133.52	7678.12	6827.86	5901.37	5096.04					
1559	5651.56	6389.19	7189.80	7854.60	8251.75	8139.22	7683.65	6832.86	5905.56	5098.97					

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1530	4561.618	4633.19	5062.38	5878.69	6781.78
1531	4561.909	4633.47	5062.63	5878.83	6782.22
1532	4562.187	4633.73	5062.89	5878.95	6782.61
1533	4562.459	4633.99	5063.15	5879.05	6782.97
1534	4562.735	4634.25	5063.41	5879.16	6783.35
1535	4563.020	4634.52	5063.68	5879.29	6783.77
1536	4563.321	4634.80	5063.96	5879.47	6784.27
1537	4563.641	4635.09	5064.26	5879.73	6784.89
1538	4563.981	4635.39	5064.59	5880.09	6785.71
1539	4564.340	4635.70	5064.95	5880.59	6786.76
1540	4564.714	4636.00	5065.34	5881.26	6788.09
1541	4565.101	4636.29	5065.76	5882.13	6789.76
1542	4565.496	4636.56	5066.22	5883.21	6791.77
1543	4565.896	4636.80	5066.67	5884.49	6794.14
1544	4566.298	4637.01	5067.16	5885.98	6796.86
1545	4566.684	4637.26	5067.77	5887.73	6799.93
1546	4567.039	4637.60	5068.64	5889.80	6803.31
1547	4567.419	4638.11	5069.81	5892.19	6807.00
1548	4567.939	4638.85	5071.31	5894.90	6810.98
1549	4568.700	4639.89	5073.14	5897.92	6815.20
1550	4569.747	4641.23	5075.28	5901.22	6819.66
1551	4571.100	4642.89	5077.73	5904.78	6824.32
1552	4572.740	4644.83	5080.44	5908.57	6829.15
1553	4574.639	4647.02	5083.36	5912.54	6834.12
1554	4576.749	4649.41	5086.46	5916.65	6839.26
1555	4579.005	4651.93	5089.68	5920.86	6844.34
1556	4581.329	4654.52	5092.94	5925.11	6849.51
1557	4583.637	4657.09	5096.20	5929.34	6854.67
1558	4585.849	4659.58	5099.38	5933.52	6859.79
1559	4587.891	4661.90	5102.42	5937.59	6864.83

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	LONGERON 12	EARTH END	SPACE END
1530	6257.91	5517.24	5033.87	5086.26	3251.05
1531	6268.26	5529.26	5046.95	5099.31	3253.02
1532	6278.93	5541.62	5060.36	5112.70	3254.98
1533	6289.74	5554.12	5073.90	5126.23	3256.94
1534	6300.48	5566.55	5087.38	5139.70	3258.90
1535	6310.98	5578.72	5100.61	5152.90	3260.86
1536	6321.07	5590.46	5113.40	5165.86	3262.82
1537	6330.67	5601.63	5125.61	5177.84	3264.79
1538	6339.72	5612.15	5137.12	5189.31	3266.76
1539	6348.23	5621.98	5147.85	5199.98	3268.76
1540	6356.22	5631.09	5157.74	5209.78	3270.78
1541	6363.71	5639.48	5166.75	5218.68	3272.82
1542	6370.75	5647.15	5174.83	5226.63	3274.89
1543	6377.34	5654.08	5181.96	5233.59	3277.00
1544	6383.50	5660.29	5188.14	5239.57	3279.12
1545	6389.25	5665.75	5193.36	5244.64	3281.27
1546	6394.58	5670.48	5197.61	5248.87	3283.44
1547	6399.53	5674.53	5200.99	5252.37	3285.63
1548	6404.12	5678.00	5203.66	5255.25	3287.82
1549	6408.38	5681.00	5205.78	5257.62	3290.02
1550	6412.34	5683.61	5207.45	5259.58	3292.23
1551	6416.05	5685.91	5208.79	5261.21	3294.43
1552	6419.54	5687.97	5209.87	5262.57	3296.64
1553	6422.85	5689.84	5210.75	5263.73	3298.84
1554	6426.03	5691.58	5211.51	5264.76	3301.04
1555	6429.12	5693.24	5212.19	5265.69	3303.24
1556	6432.17	5694.87	5212.84	5266.59	3305.44
1557	6435.24	5696.50	5213.50	5267.50	3307.64
1558	6438.36	5698.18	5214.21	5268.46	3309.84
1559	6441.58	5699.96	5215.00	5269.52	3312.05

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1560	5653.50	6392.29	7194.08	7859.66	8257.31
1561	5655.62	6395.56	7198.50	7864.80	8262.90
1562	5657.98	6399.04	7203.08	7870.06	8268.54
1563	5660.64	6402.78	7207.86	7875.43	8274.22
1564	5663.65	6406.80	7212.85	7880.93	8279.93
1565	5667.05	6411.14	7218.07	7886.57	8285.69
1566	5670.91	6415.83	7223.53	7892.34	8291.46
1567	5675.27	6420.90	7229.23	7898.24	8297.24
1568	5680.20	6426.37	7235.18	7904.25	8303.02
1569	5685.80	6432.31	7241.38	7910.35	8308.78
1570	5692.19	6438.76	7247.80	7916.55	8314.50
1571	5699.41	6445.73	7254.44	7922.81	8320.17
1572	5707.41	6453.20	7261.36	7929.13	8325.77
1573	5716.13	6461.13	7268.35	7935.50	8331.30
1574	5725.52	6469.51	7275.60	7941.91	8336.75
1575	5735.76	6478.46	7283.13	7948.38	8342.09
1576	5746.65	6487.87	7290.89	7954.92	8347.34
1577	5757.79	6497.46	7298.76	7961.48	8352.55
1578	5769.02	6507.12	7306.67	7968.05	8357.74
1579	5780.19	6516.73	7314.55	7974.62	8362.95
1580	5791.13	6526.18	7322.34	7981.16	8368.19
1581	5801.70	6535.36	7329.99	7987.66	8373.48
1582	5811.76	6544.20	7337.45	7994.13	8378.84
1583	5821.22	6552.62	7344.72	8000.54	8384.28
1584	5829.99	6560.58	7351.79	8006.91	8389.81
1585	5838.00	6568.06	7358.64	8013.23	8395.41
1586	5845.17	6575.00	7365.27	8019.49	8401.09
1587	5851.45	6581.37	7371.67	8025.67	8406.81
1588	5856.87	6587.19	7377.80	8031.76	8412.58
1589	5861.63	6592.55	7383.69	8037.74	8418.36

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1560	4589.819	4664.12	5105.37	5941.58	6889.82
1561	4591.495	4666.09	5108.11	5945.39	6874.67
1562	4592.888	4667.79	5110.59	5948.99	6879.35
1563	4593.980	4669.18	5112.79	5952.33	6883.84
1564	4594.786	4670.27	5114.67	5955.40	6888.11
1565	4595.346	4671.06	5116.23	5958.17	6892.13
1566	4595.742	4671.61	5117.47	5960.63	6895.88
1567	4596.097	4671.99	5118.41	5962.77	6899.34
1568	4596.471	4672.26	5119.09	5964.61	6902.50
1569	4596.873	4672.47	5119.60	5966.17	6905.34
1570	4597.274	4672.70	5120.06	5967.53	6907.84
1571	4597.672	4672.95	5120.51	5968.70	6910.02
1572	4598.064	4673.24	5120.95	5969.69	6911.88
1573	4598.447	4673.53	5121.36	5970.50	6913.44
1574	4598.819	4673.83	5121.75	5971.14	6914.73
1575	4599.173	4674.14	5122.10	5971.61	6915.71
1576	4599.510	4674.44	5122.42	5971.95	6916.49
1577	4599.839	4674.73	5122.73	5972.24	6917.20
1578	4600.165	4675.02	5123.04	5972.52	6917.87
1579	4600.493	4675.32	5123.35	5972.82	6918.57
1580	4600.828	4675.62	5123.67	5973.15	6919.33
1581	4601.174	4675.92	5124.01	5973.54	6920.20
1582	4601.532	4676.22	5124.36	5974.04	6921.25
1583	4601.903	4676.52	5124.74	5974.67	6922.51
1584	4602.286	4676.82	5125.15	5975.47	6924.05
1585	4602.678	4677.10	5125.60	5976.45	6925.91
1586	4603.075	4677.36	5126.05	5977.64	6928.11
1587	4603.476	4677.58	5126.51	5979.02	6930.66
1588	4603.880	4677.80	5127.05	5980.64	6933.57
1589	4604.244	4678.09	5127.79	5982.56	6936.82

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1560	6444.87	5701.81	5215.87	5270.67
1561	6448.33	5703.84	5216.91	5272.00
1562	6452.00	5706.11	5218.21	5273.59
1563	6455.93	5708.67	5219.83	5275.49
1564	6460.13	5711.60	5221.86	5277.79
1565	6464.66	5714.98	5224.42	5280.57
1566	6469.53	5718.89	5227.64	5283.93
1567	6474.77	5723.45	5231.67	5287.97
1568	6480.40	5728.70	5236.81	5292.79
1569	6486.42	5734.67	5242.48	5298.47
1570	6492.85	5741.32	5249.24	5305.04
1571	6499.67	5748.85	5258.89	5312.54
1572	6506.91	5756.63	5265.38	5320.91
1573	6514.56	5765.25	5274.66	5330.09
1574	6522.62	5774.47	5284.68	5340.03
1575	6531.27	5784.48	5295.62	5350.92
1576	6540.42	5795.12	5307.26	5362.51
1577	6549.77	5806.01	5319.17	5374.38
1578	6559.21	5816.99	5331.18	5388.36
1579	6568.59	5827.91	5343.13	5398.26
1580	6577.78	5838.60	5354.82	5409.92
1581	6586.68	5848.93	5366.12	5421.16
1582	6595.20	5858.78	5376.87	5431.85
1583	6603.31	5868.06	5386.96	5441.86
1584	6610.98	5876.71	5396.30	5451.10
1585	6618.22	5884.70	5404.79	5459.48
1586	6625.03	5891.99	5412.39	5466.92
1587	6631.39	5898.55	5419.03	5473.37
1588	6637.32	5904.35	5424.68	5478.83
1589	6642.84	5909.41	5429.36	5483.43

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1590	5865.76	6597.45	7389.28	8043.58	8424.14
1591	5869.32	6601.91	7394.59	8049.26	8429.90
1592	5872.36	6805.95	7399.59	8054.78	8435.62
1593	5874.92	6609.61	7404.31	8060.11	8441.28
1594	5877.06	6612.89	7408.74	8065.27	8446.88
1595	5878.83	6615.84	7412.90	8070.24	8452.41
1596	5880.28	6618.50	7416.81	8075.05	8457.85
1597	5881.47	6620.89	7420.49	8079.68	8463.22
1598	5882.45	6623.07	7423.97	8084.18	8468.51
1599	5883.28	6625.07	7427.28	8088.54	8473.73
1600	5884.00	6628.95	7430.47	8092.81	8478.90
1601	5884.66	6628.75	7433.58	8097.02	8484.03
1602	5885.29	6630.52	7436.65	8101.19	8489.14
1603	5885.93	6632.29	7439.72	8105.37	8494.25
1604	5886.60	6634.11	7442.85	8109.59	8499.39
1605	5887.35	6636.02	7446.07	8113.89	8504.57
1606	5888.21	6638.06	7449.43	8118.28	8509.81
1607	5889.23	6640.29	7452.95	8122.81	8515.12
1608	5890.47	6642.73	7456.68	8127.48	8520.50
1609	5891.97	6645.43	7460.62	8132.30	8525.96
1610	5893.77	6648.41	7464.80	8137.30	8531.49
1611	5895.92	6651.70	7469.24	8142.46	8537.09
1612	5898.46	6655.34	7473.94	8147.78	8542.75
1613	5901.42	6659.32	7478.90	8153.27	8548.46
1614	5904.83	6663.67	7484.13	8158.91	8554.22
1615	5908.72	6668.39	7489.60	8164.69	8559.99
1616	5913.10	6673.47	7495.32	8170.59	8565.77
1617	5918.00	6678.92	7501.26	8176.59	8571.55
1618	5923.44	6684.75	7507.40	8182.68	8577.32
1619	5929.46	6690.95	7513.72	8188.84	8583.05

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
1590	4604.607	4678.54	5128.86	5984.84	6940.41
1591	4605.095	4679.24	5130.30	5987.50	6944.33
1592	4605.879	4680.30	5132.16	5990.55	6948.58
1593	4607.065	4681.79	5134.45	5993.97	6953.14
1594	4608.718	4683.74	5137.16	5997.77	6957.98
1595	4610.889	4686.18	5140.31	6001.92	6963.08
1596	4613.612	4689.13	5143.88	6006.41	6968.41
1597	4616.918	4692.59	5147.83	6011.19	6973.96
1598	4620.788	4696.52	5152.13	6016.23	6979.67
1599	4625.146	4700.86	5156.73	6021.49	6985.52
1600	4629.883	4705.53	5161.57	6026.93	6991.47
1601	4634.873	4710.42	5166.57	6032.48	6997.49
1602	4639.980	4715.41	5171.65	6038.08	7003.54
1603	4645.066	4720.38	5176.72	6043.68	7009.59
1604	4649.994	4725.22	5181.69	6049.20	7015.59
1605	4654.638	4729.81	5186.47	6054.59	7021.52
1606	4658.879	4734.05	5190.99	6059.80	7027.34
1607	4662.625	4737.87	5195.22	6064.79	7033.01
1608	4665.813	4741.23	5199.10	6069.51	7038.51
1609	4668.451	4744.10	5202.60	6073.95	7043.82
1610	4670.571	4746.50	5205.71	6078.07	7048.89
1611	4672.211	4748.44	5208.41	6081.85	7053.73
1612	4673.420	4749.95	5210.72	6085.30	7058.30
1613	4674.259	4751.08	5212.64	6088.40	7062.59
1614	4674.815	4751.87	5214.19	6091.17	7066.61
1615	4675.206	4752.40	5215.42	6093.60	7070.34
1616	4675.560	4752.77	5216.34	6095.73	7073.79
1617	4675.932	4753.04	5217.03	6097.58	7076.96
1618	4676.335	4753.27	5217.56	6099.20	7079.87
1619	4676.737	4753.48	5218.04	6100.65	7082.53

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11	LONGERON 11	ROW 12	LONGERON 12	EARTH END	SPACE END
1590	6647.92	5913.67	5433.02	5487.16	3376.84	10981.23
1591	6652.56	5917.23	5435.80	5490.13	3379.03	10988.76
1592	6656.79	5920.19	5437.87	5492.47	3381.23	10996.35
1593	6660.63	5922.65	5439.38	5494.27	3383.44	11003.97
1594	6664.11	5924.70	5440.44	5495.62	3385.64	11011.58
1595	6667.25	5926.41	5441.17	5496.60	3387.85	11019.17
1596	6670.10	5927.85	5441.66	5497.31	3390.04	11026.70
1597	6672.68	5929.12	5442.05	5497.83	3392.22	11034.17
1598	6675.04	5930.28	5442.40	5498.23	3394.40	11041.58
1599	6677.23	5931.37	5442.76	5498.55	3396.57	11048.92
1600	6679.28	5932.41	5443.12	5498.84	3398.73	11056.21
1601	6681.24	5933.41	5443.50	5499.10	3400.88	11063.46
1602	6683.16	5934.41	5443.88	5499.35	3403.03	11070.70
1603	6685.09	5935.40	5444.26	5499.60	3405.18	11077.93
1604	6687.08	5936.41	5444.63	5499.86	3407.34	11085.20
1605	6689.16	5937.46	5445.00	5500.16	3409.50	11092.50
1606	6691.39	5938.57	5445.35	5500.50	3411.67	11099.86
1607	6693.80	5939.75	5445.71	5500.92	3413.85	11107.28
1608	6696.43	5941.05	5446.10	5501.47	3416.03	11114.76
1609	6699.31	5942.53	5446.63	5502.21	3418.23	11122.31
1610	6702.49	5944.26	5447.38	5503.23	3420.43	11129.89
1611	6705.97	5946.32	5448.45	5504.59	3422.64	11137.51
1612	6709.80	5948.76	5449.94	5506.37	3424.84	11145.13
1613	6713.97	5951.64	5451.92	5508.61	3427.04	11152.73
1614	6718.50	5955.02	5454.49	5511.40	3429.24	11160.28
1615	6723.40	5958.98	5457.75	5514.80	3431.43	11167.75
1616	6728.65	5963.56	5461.83	5518.88	3433.60	11175.14
1617	6734.26	5968.78	5466.72	5523.66	3435.76	11182.41
1618	6740.20	5974.60	5472.39	5529.14	3437.89	11189.55
1619	6746.43	5980.94	5478.74	5535.29	3440.02	11196.56

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1620	5936.01	6697.50	7520.18	8195.04	8451.45
1621	5942.96	6704.30	7526.76	8201.28	8594.45
1622	5950.28	6711.34	7533.43	8207.55	8600.12
1623	5957.84	6718.53	7540.16	8213.84	8605.76
1624	5965.51	6725.79	7546.93	8220.14	8611.39
1625	5973.17	6733.05	7553.69	8226.44	8617.03
1626	5980.68	6740.20	7560.41	8232.72	8622.68
1627	5987.98	6747.18	7567.06	8238.98	8628.35
1628	5994.71	6753.89	7573.59	8245.21	8634.04
1629	6001.00	6760.27	7579.99	8251.40	8639.77
1630	6006.70	6766.27	7586.21	8257.52	8645.52
1631	6011.81	6771.87	7592.23	8263.56	8651.30
1632	6016.35	6777.06	7598.02	8269.49	8657.08
1633	6020.33	6781.86	7603.55	8275.29	8662.86
1634	6023.78	6788.23	7608.79	8280.95	8668.61
1635	6026.71	6790.19	7613.73	8286.42	8674.32
1636	6029.14	6793.72	7618.36	8291.70	8679.97
1637	6031.09	6798.84	7622.65	8296.77	8685.53
1638	6032.61	6799.56	7628.62	8301.61	8690.99
1639	6033.74	6801.90	7630.24	8306.21	8695.34
1640	6034.55	6803.88	7633.54	8310.56	8701.55
1641	6035.12	6805.55	7638.50	8314.65	8706.62
1642	6035.59	6807.00	7639.15	8318.49	8711.53
1643	6036.05	6808.27	7641.51	8322.08	8716.29
1644	6036.50	6809.40	7643.60	8325.44	8720.91
1645	6036.95	6810.39	7645.46	8328.60	8725.39
1646	6037.37	6811.27	7647.14	8331.61	8729.76
1647	6037.78	6812.08	7648.69	8334.50	8734.05
1648	6038.19	6812.84	7650.17	8337.32	8738.29
1649	6038.59	6813.59	7651.63	8340.12	8742.52

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1620	4677.137	4753.71	5218.49	6101.97	7084.97
1621	4677.536	4753.95	5218.94	6103.20	7087.25
1622	4677.933	4754.22	5219.40	6104.35	7089.39
1623	4678.329	4754.49	5219.86	6105.45	7091.44
1624	4678.723	4754.77	5220.31	6106.52	7093.43
1625	4679.119	4755.04	5220.77	6107.59	7095.44
1626	4679.515	4755.32	5221.23	6108.70	7097.50
1627	4679.912	4755.57	5221.68	6109.87	7099.68
1628	4680.312	4755.81	5222.13	6111.13	7102.02
1629	4680.712	4756.03	5222.59	6112.52	7104.57
1630	4681.115	4756.25	5223.09	6114.06	7107.36
1631	4681.501	4756.49	5223.71	6115.81	7110.43
1632	4681.856	4756.83	5224.56	6117.85	7113.79
1633	4682.233	4757.32	5225.71	6120.22	7117.46
1634	4682.770	4758.09	5227.24	6122.96	7121.45
1635	4683.635	4759.24	5229.19	6126.08	7125.77
1636	4684.963	4760.87	5231.61	6129.63	7130.42
1637	4686.861	4763.06	5234.54	6133.60	7135.39
1638	4689.458	4785.90	5238.01	6138.01	7140.67
1639	4692.911	4789.47	5242.05	6142.86	7146.26
1640	4697.339	4773.88	5246.70	6148.15	7152.13
1641	4702.752	4779.14	5251.99	6153.90	7158.26
1642	4709.055	4785.27	5258.01	6160.13	7164.62
1643	4716.162	4792.23	5264.77	6166.84	7171.18
1644	4723.982	4799.93	5272.20	6173.97	7177.93
1645	4732.403	4808.26	5280.18	6181.46	7184.83
1646	4741.305	4817.08	5288.61	6189.23	7191.84
1647	4750.555	4826.26	5297.34	6197.20	7198.95
1648	4760.005	4835.64	5306.30	6205.30	7206.11
1649	4769.507	4845.07	5315.23	6213.42	7213.28

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1620	6752.93	5987.72	5485.68	5542.05
1621	6759.63	5994.83	5493.04	5549.25
1622	6766.51	6002.24	5500.79	5556.85
1623	6773.51	6009.84	5508.80	5564.73
1624	6780.58	6017.55	5516.93	5572.74
1625	6787.63	6025.24	5525.05	5580.72
1626	6794.61	6032.80	5533.00	5588.54
1627	6801.44	6040.13	5540.65	5596.04
1628	6808.07	6047.13	5547.86	5603.08
1629	6814.44	6053.69	5554.52	5609.54
1630	6820.51	6059.75	5560.50	5615.33
1631	6826.25	6065.21	5565.71	5620.38
1632	6831.62	6069.99	5570.03	5624.68
1633	6836.59	6074.08	5573.46	5628.21
1634	6841.15	6077.50	5576.08	5631.05
1635	6845.30	6080.35	5578.02	5633.26
1636	6849.02	6082.68	5579.38	5634.91
1637	6852.33	6084.55	5580.27	5636.07
1638	6855.24	6086.04	5580.81	5636.84
1639	6857.76	6087.28	5581.18	5637.32
1640	6859.92	6088.36	5581.54	5637.64
1641	6861.74	6089.32	5581.93	5637.87
1642	6863.25	6090.13	5582.33	5638.08
1643	6864.47	6090.81	5582.73	5638.32
1644	6865.45	6091.37	5583.13	5638.59
1645	6866.25	6091.84	5583.52	5638.87
1646	6866.90	6092.24	5583.91	5639.16
1647	6867.45	6092.59	5584.29	5639.46
1648	6867.94	6092.91	5584.67	5639.75
1649	6868.43	6093.23	5585.05	5640.05

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1650	6814.36	7653.13	8342.95	8746.78	8609.20
1651	6815.17	7654.68	8345.84	8751.06	8614.62
1652	6816.05	7656.36	8348.84	8755.44	8620.08
1653	6817.04	7658.22	8352.00	8759.92	8625.59
1654	6818.16	7660.29	8355.35	8764.52	8631.16
1655	6819.41	7662.61	8358.91	8769.27	8636.77
1656	6820.82	7665.20	8362.70	8774.15	8642.44
1657	6822.43	7668.09	8366.73	8779.18	8648.14
1658	6824.30	7671.27	8370.99	8784.34	8653.87
1659	6826.47	7674.74	8375.48	8789.63	8659.62
1660	6828.96	7678.51	8380.18	8795.03	8665.36
1661	6831.79	7682.56	8385.08	8800.52	8671.08
1662	6834.94	7686.89	8390.17	8806.09	8676.77
1663	6838.42	7691.47	8395.42	8811.72	8682.42
1664	6842.20	7696.28	8400.82	8817.41	8688.01
1665	6846.40	7701.40	8406.40	8823.15	8693.53
1666	6850.77	7706.76	8412.11	8828.91	8698.96
1667	6855.69	7712.25	8417.90	8834.69	8704.35
1668	6860.56	7717.83	8423.73	8840.47	8709.71
1669	6865.50	7723.46	8429.58	8846.25	8715.03
1670	6870.48	7729.10	8435.45	8852.03	8720.36
1671	6875.42	7734.73	8441.30	8857.82	8725.69
1672	6880.28	7740.30	8447.13	8863.60	8731.04
1673	6884.99	7745.78	8452.91	8869.37	8736.44
1674	6889.52	7751.13	8458.62	8875.14	8741.88
1675	6893.81	7756.31	8464.24	8880.88	8747.37
1676	6899.33	7761.30	8469.74	8886.60	8752.93
1677	6901.97	7766.06	8475.11	8892.28	8758.53
1678	6904.93	7770.57	8480.31	8897.89	8764.19
1679	6906.08	7774.80	8485.33	8903.44	8769.90

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 6	ROW 7 LONGERON	ROW 7	ROW 8 LONGERON	ROW 8	ROW 9 LONGERON	ROW 9	ROW 10 LONGERON	ROW 10
1650	4778.911	4854.41	5324.11	6221.49	7220.42	8102.49	8713.62	8785.14	8480.96	7731.31
1651	4788.160	4863.58	5332.84	6229.46	7227.53	8108.92	8719.20	8789.52	8484.02	7732.94
1652	4797.068	4872.41	5341.27	6237.23	7234.55	8115.32	8724.82	8793.97	8487.19	7734.69
1653	4805.509	4880.76	5349.27	6244.73	7241.45	8121.69	8730.48	8798.54	8490.52	7736.60
1654	4813.376	4888.51	5356.75	6251.89	7248.21	8128.03	8736.18	8803.23	8494.02	7738.71
1655	4820.573	4895.56	5363.59	6258.65	7254.79	8134.31	8741.93	8808.05	8497.72	7741.05
1656	4827.027	4901.85	5369.75	6264.97	7261.19	8140.53	8747.71	8813.02	8501.64	7743.67
1657	4832.678	4907.33	5375.22	6270.84	7267.38	8146.67	8753.52	8818.13	8505.78	7746.58
1658	4837.449	4912.03	5380.08	6276.29	7273.35	8152.71	8759.35	8823.36	8510.15	7749.79
1659	4841.337	4915.97	5384.39	6281.34	7279.06	8158.64	8765.19	8828.72	8514.74	7753.31
1660	4844.401	4919.22	5388.19	6286.01	7284.53	8164.44	8771.01	8834.19	8519.54	7757.13
1661	4846.798	4921.88	5391.51	6290.30	7289.73	8170.09	8776.80	8839.74	8524.54	7761.24
1662	4848.645	4924.02	5394.40	6294.24	7294.67	8175.59	8782.56	8845.36	8529.70	7765.63
1663	4850.045	4925.72	5396.89	6297.84	7299.36	8180.93	8788.26	8851.04	8535.03	7770.26
1664	4851.083	4927.06	5399.02	6301.13	7303.81	8186.12	8793.90	8856.77	8540.50	7775.13
1665	4851.741	4927.97	5400.03	6304.03	7307.94	8191.10	8799.46	8862.54	8546.15	7780.29
1666	4852.183	4928.61	5402.09	6306.61	7311.80	8195.88	8804.92	8868.33	8551.94	7785.69
1667	4852.570	4929.14	5403.30	6309.04	7315.52	8200.57	8810.34	8874.12	8557.78	7791.20
1668	4852.937	4929.60	5404.39	6311.34	7319.14	8205.17	8815.72	8879.92	8563.67	7796.79
1669	4853.297	4930.03	5405.42	6313.58	7322.69	8209.74	8821.07	8885.72	8569.59	7802.43
1670	4853.654	4930.44	5406.43	6315.80	7326.22	8214.28	8826.42	8891.51	8575.51	7808.09
1671	4854.014	4930.87	5407.46	6318.04	7329.78	8218.85	8831.77	8897.31	8581.43	7813.73
1672	4854.383	4931.33	5408.56	6320.36	7333.40	8223.46	8837.15	8903.11	8587.32	7819.32
1673	4854.773	4931.87	5409.78	6322.80	7337.13	8228.16	8842.57	8908.90	8593.16	7824.82
1674	4855.226	4932.52	5411.17	6325.40	7341.01	8232.96	8848.04	8914.69	8598.94	7830.20
1675	4855.819	4933.36	5412.78	6328.21	7345.07	8237.88	8853.58	8920.47	8604.62	7835.43
1676	4856.626	4934.44	5414.66	6331.28	7349.34	8242.95	8859.17	8926.22	8610.20	7840.46
1677	4857.740	4935.86	5416.87	6334.65	7353.84	8248.18	8864.83	8931.94	8615.63	7845.28
1678	4859.259	4937.68	5419.47	6338.34	7358.60	8253.57	8870.55	8937.60	8620.92	7849.84
1679	4861.291	4940.00	5422.51	6342.40	7363.64	8259.12	8876.32	8943.20	8626.02	7854.13

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1650	6868.94	6093.56	5585.44	3505.58
1651	6869.49	6093.91	5585.82	3507.61
1652	6870.13	6094.30	5586.21	3509.66
1653	6870.92	6094.77	5586.60	3511.72
1654	6871.89	6095.32	5587.00	3513.80
1655	6873.08	6095.99	5587.39	3515.90
1656	6874.53	6096.78	5587.80	3518.02
1657	6876.27	6097.70	5588.20	3520.16
1658	6878.31	6098.73	5588.56	3522.32
1659	6880.66	6099.89	5588.92	3524.50
1660	6883.35	6101.22	5589.33	3526.68
1661	6886.36	6102.80	5589.95	3528.88
1662	6889.71	6104.71	5590.87	3531.09
1663	6893.37	6106.97	5592.16	3533.29
1664	6897.35	6109.60	5593.85	3535.50
1665	6901.73	6112.77	5596.17	3537.70
1666	6906.47	6116.46	5599.10	3539.89
1667	6911.38	6120.44	5602.40	3542.08
1668	6916.42	6124.65	5605.99	3544.26
1669	6921.55	6129.00	5609.76	3546.43
1670	6926.70	6133.39	5613.59	3548.61
1671	6931.82	6137.74	5617.35	3550.79
1672	6936.85	6141.93	5620.92	3552.97
1673	6941.75	6145.88	5624.19	3555.16
1674	6946.46	6149.53	5627.08	3557.35
1675	6950.94	6152.84	5629.55	3559.55
1676	6955.14	6155.77	5631.58	3561.75
1677	6959.05	6158.31	5633.18	3563.95
1678	6962.62	6160.46	5634.35	3566.16
1679	6965.85	6162.25	5635.16	3568.36

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON	ROW 2 LONGERON	ROW 3 LONGERON	ROW 4 LONGERON	ROW 5 LONGERON
1680	6107.56	6910.65	7778.72	8490.15	8908.89
1681	6108.67	6912.96	7782.33	8494.73	8914.23
1682	6109.67	6915.16	7785.84	8499.24	8919.53
1683	6110.38	6917.02	7789.00	8503.49	8924.68
1684	6110.89	6918.57	7791.81	8507.46	8929.68
1685	6111.34	6919.90	7794.26	8511.13	8934.49
1686	6111.80	6921.02	7796.34	8514.49	8939.10
1687	6112.23	6921.93	7798.07	8517.53	8943.50
1688	6112.63	6922.65	7799.48	8520.28	8947.69
1689	6112.99	6923.19	7800.59	8522.76	8951.67
1690	6113.33	6923.60	7801.48	8524.99	8955.44
1691	6113.64	6923.90	7802.18	8527.02	8959.04
1692	6113.94	6924.13	7802.76	8528.90	8962.49
1693	6114.22	6924.31	7803.27	8530.68	8965.84
1694	6114.50	6924.48	7803.74	8532.42	8969.14
1695	6114.78	6924.65	7804.22	8534.16	8972.45
1696	6115.06	6924.84	7804.74	8535.96	8975.82
1697	6115.36	6925.09	7805.35	8537.88	8979.31
1698	6115.68	6925.41	7806.10	8539.95	8982.95
1699	6116.02	6925.84	7807.03	8542.23	8986.76
1700	6116.39	6926.42	7808.20	8544.76	8990.78
1701	6116.80	6927.17	7809.65	8547.55	8995.00
1702	6117.23	6928.10	7811.42	8550.64	8999.43
1703	6117.69	6929.24	7813.53	8554.01	9004.06
1704	6118.14	6930.56	7815.97	8557.68	9008.87
1705	6118.70	6932.22	7818.93	8561.77	9013.93
1706	6119.62	6934.33	7822.35	8566.21	9019.19
1707	6120.84	6936.76	7826.05	8570.87	9024.57
1708	6122.38	6939.49	7830.03	8575.72	9030.03
1709	6124.22	6942.51	7834.24	8580.73	9035.58

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1680	4863.970	4942.91	5426.04	6346.86	7368.96
1681	4867.482	4946.54	5430.12	6351.74	7374.56
1682	4871.279	4950.40	5434.37	6356.75	7380.26
1683	4876.090	4955.14	5439.26	6362.22	7386.23
1684	4881.946	4960.82	5444.90	6368.20	7392.47
1685	4888.803	4967.52	5451.43	6374.75	7398.98
1686	4896.637	4975.24	5458.87	6381.89	7405.73
1687	4905.410	4983.93	5467.17	6389.59	7412.71
1688	4915.071	4993.52	5476.29	6397.81	7419.92
1689	4925.561	5003.97	5486.15	6406.53	7427.38
1690	4936.797	5015.17	5496.71	6415.73	7435.07
1691	4948.673	5027.03	5507.85	6425.36	7442.99
1692	4961.058	5039.40	5519.47	6435.33	7451.11
1693	4973.793	5052.13	5531.41	6445.55	7459.38
1694	4986.694	5065.03	5543.51	6455.89	7467.73
1695	4999.570	5077.90	5555.59	6466.21	7476.06
1696	5012.228	5090.54	5567.46	6476.37	7484.30
1697	5024.499	5102.80	5578.97	6486.26	7492.38
1698	5036.232	5114.51	5589.98	6495.79	7500.24
1699	5047.314	5125.56	5600.39	6504.89	7507.88
1700	5057.650	5135.85	5610.12	6513.52	7515.29
1701	5067.174	5145.30	5619.10	6521.66	7522.47
1702	5075.841	5153.88	5627.31	6529.29	7529.42
1703	5083.611	5161.53	5634.69	6536.39	7536.16
1704	5090.460	5168.22	5641.21	6542.94	7542.66
1705	5095.918	5173.53	5646.53	6548.71	7548.80
1706	5099.971	5177.61	5650.95	6553.84	7554.56
1707	5103.199	5181.00	5654.85	6558.58	7560.08
1708	5105.769	5183.81	5658.30	6562.98	7565.36
1709	5107.826	5186.15	5661.36	6567.06	7570.40

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1680	6968.71	6163.71	5635.67	5693.61
1681	6971.21	6164.94	5636.04	5694.08
1682	6973.60	6166.11	5636.39	5694.49
1683	6975.63	6167.14	5636.76	5694.77
1684	6977.29	6168.03	5637.16	5694.99
1685	6978.60	6168.75	5637.56	5695.21
1686	6979.58	6169.31	5637.98	5695.48
1687	6980.27	6169.72	5638.35	5695.77
1688	6980.71	6170.02	5638.73	5696.07
1689	6980.98	6170.23	5639.09	5696.37
1690	6981.14	6170.39	5639.44	5696.67
1691	6981.26	6170.52	5639.77	5696.97
1692	6981.38	6170.65	5640.08	5697.26
1693	6981.51	6170.78	5640.39	5697.54
1694	6981.65	6170.92	5640.68	5697.82
1695	6981.79	6171.06	5640.98	5698.09
1696	6981.92	6171.19	5641.29	5698.38
1697	6982.03	6171.32	5641.60	5698.67
1698	6982.15	6171.45	5641.94	5698.96
1699	6982.33	6171.62	5642.29	5699.27
1700	6982.63	6171.84	5642.66	5699.57
1701	6983.11	6172.16	5643.04	5699.87
1702	6983.83	6172.59	5643.43	5700.16
1703	6984.83	6173.16	5643.82	5700.42
1704	6986.14	6173.88	5644.22	5700.65
1705	6987.94	6174.83	5644.62	5700.88
1706	6990.24	6175.97	5644.97	5701.24
1707	6992.85	6177.25	5645.37	5701.78
1708	6995.77	6178.76	5645.92	5702.56
1709	6998.99	6180.53	5646.70	5703.61

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1710	6126.36	6945.80	7838.67	8585.89	9041.17
1711	6128.77	6949.32	7843.29	8591.16	9046.82
1712	6131.41	6953.04	7848.05	8596.53	9052.49
1713	6134.17	6956.86	7852.89	8601.94	9058.18
1714	6137.08	6960.80	7857.82	8607.41	9063.89
1715	6140.10	6964.83	7862.82	8612.92	9069.61
1716	6143.16	6968.89	7867.84	8618.44	9075.33
1717	6146.19	6972.94	7872.84	8623.96	9081.05
1718	6149.14	6976.91	7877.80	8629.44	9086.76
1719	6151.95	6980.77	7882.67	8634.87	9092.46
1720	6154.56	6984.47	7887.42	8640.23	9098.13
1721	6156.94	6987.96	7892.01	8645.49	9103.77
1722	6159.04	6991.21	7896.41	8650.62	9109.36
1723	6160.84	6994.19	7900.59	8655.61	9114.89
1724	6162.32	6996.87	7904.52	8660.43	9120.34
1725	6163.49	6999.25	7908.19	8665.06	9125.70
1726	6164.37	7001.31	7911.56	8669.47	9130.95
1727	6164.99	7003.07	7914.62	8673.63	9136.06
1728	6165.48	7004.56	7917.34	8677.53	9141.01
1729	6165.94	7005.85	7919.72	8681.15	9145.78
1730	6166.39	7006.95	7921.76	8684.47	9150.37
1731	6166.82	7007.84	7923.46	8687.48	9154.75
1732	6167.22	7008.54	7924.83	8690.21	9158.92
1733	6167.58	7009.07	7925.93	8692.66	9162.88
1734	6167.91	7009.46	7926.79	8694.86	9166.63
1735	6168.22	7009.75	7927.47	8696.86	9170.20
1736	6168.51	7009.96	7928.02	8698.71	9173.61
1737	6168.79	7010.12	7928.49	8700.44	9176.91
1738	6169.06	7010.27	7928.92	8702.11	9180.14
1739	6169.33	7010.41	7929.35	8703.77	9183.37

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1710	5109.480	5188.11	5664.08	6570.85	7575.24
1711	5110.825	5189.76	5666.52	6574.41	7579.90
1712	5111.934	5191.17	5668.72	6577.77	7584.40
1713	5112.939	5192.47	5670.83	6581.03	7588.83
1714	5113.813	5193.63	5672.78	6584.17	7593.15
1715	5114.611	5194.70	5674.66	6587.23	7597.41
1716	5115.379	5195.74	5676.49	6590.26	7601.65
1717	5116.164	5196.80	5678.35	6593.30	7605.90
1718	5117.010	5197.93	5680.27	6596.41	7610.20
1719	5117.970	5199.19	5682.33	6599.63	7614.59
1720	5119.107	5200.62	5684.56	6603.02	7619.12
1721	5120.490	5202.31	5687.04	6606.60	7623.79
1722	5122.195	5204.32	5689.80	6610.44	7628.66
1723	5124.320	5206.72	5692.91	6614.56	7633.74
1724	5126.980	5209.61	5696.43	6619.01	7639.05
1725	5130.328	5213.10	5700.41	6623.81	7644.61
1726	5134.525	5217.31	5704.91	6629.00	7650.41
1727	5139.665	5222.33	5710.01	6634.62	7656.47
1728	5145.755	5228.25	5715.85	6640.73	7662.78
1729	5152.785	5235.12	5722.54	6647.39	7669.32
1730	5160.744	5242.97	5730.10	6654.61	7676.11
1731	5169.607	5251.75	5738.49	6662.35	7683.11
1732	5179.343	5261.43	5747.67	6670.62	7690.35
1733	5189.901	5271.94	5757.60	6679.39	7697.82
1734	5201.217	5283.23	5768.22	6688.64	7705.54
1735	5213.197	5295.19	5779.47	6698.33	7713.50
1736	5225.722	5307.70	5791.21	6708.40	7721.68
1737	5238.639	5320.62	5803.33	6718.75	7730.03
1738	5251.772	5333.75	5815.64	6729.26	7738.49
1739	5264.927	5346.90	5827.98	6739.78	7746.95

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1710	7002.46	6182.58	5647.77	5704.96
1711	7006.17	6184.89	5649.11	5706.60
1712	7010.08	6187.44	5650.71	5708.49
1713	7014.09	6190.10	5652.44	5710.50
1714	7018.22	6192.93	5654.37	5712.70
1715	7022.44	6195.88	5656.41	5715.01
1716	7026.69	6198.86	5658.51	5717.37
1717	7030.92	6201.83	5660.59	5719.70
1718	7035.08	6204.70	5662.55	5721.94
1719	7039.13	6207.42	5664.35	5724.01
1720	7043.02	6209.93	5665.91	5725.87
1721	7046.70	6212.21	5667.22	5727.47
1722	7050.14	6214.22	5668.24	5728.77
1723	7053.31	6215.95	5668.99	5729.79
1724	7056.18	6217.42	5669.51	5730.52
1725	7058.75	6218.68	5669.89	5731.03
1726	7060.99	6219.79	5670.24	5731.38
1727	7062.90	6220.78	5670.63	5731.63
1728	7064.48	6221.63	5671.03	5731.84
1729	7065.73	6222.32	5671.43	5732.07
1730	7066.67	6222.86	5671.82	5732.35
1731	7067.33	6223.26	5672.21	5732.64
1732	7067.76	6223.55	5672.59	5732.94
1733	7068.01	6223.75	5672.95	5733.24
1734	7068.17	6223.91	5673.30	5733.54
1735	7068.28	6224.04	5673.62	5733.84
1736	7068.40	6224.17	5673.93	5734.12
1737	7068.55	6224.31	5674.23	5734.40
1738	7068.71	6224.45	5674.52	5734.67
1739	7068.88	6224.60	5674.81	5734.94

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1740	6169.61	7010.57	7929.81	8705.49	9186.65
1741	6169.89	7010.77	7930.34	8707.36	9190.03
1742	6170.20	7011.04	7930.99	8709.27	9193.57
1743	6170.53	7011.41	7931.82	8711.44	9197.29
1744	6170.90	7011.99	7932.99	8713.97	9201.32
1745	6171.31	7012.75	7934.48	8716.80	9205.56
1746	6171.75	7013.72	7936.30	8719.92	9210.02
1747	6172.20	7014.90	7938.48	8723.37	9214.69
1748	6172.66	7016.28	7941.03	8727.12	9219.55
1749	6173.20	7017.91	7943.94	8731.17	9224.59
1750	6173.98	7019.86	7947.20	8735.49	9229.79
1751	6175.08	7022.15	7950.79	8740.07	9235.12
1752	6176.53	7024.81	7954.70	8744.87	9240.57
1753	6178.35	7027.81	7958.90	8749.87	9246.10
1754	6180.56	7031.15	7963.38	8755.06	9251.71
1755	6183.13	7034.81	7968.10	8760.40	9257.38
1756	6186.04	7038.76	7973.03	8765.87	9263.09
1757	6189.27	7042.96	7978.15	8771.45	9268.82
1758	6192.77	7047.37	7983.42	8777.12	9274.58
1759	6196.48	7051.96	7988.81	8782.85	9280.35
1760	6200.35	7058.66	7994.27	8788.62	9286.12
1761	6204.30	7061.42	7999.78	8794.41	9291.90
1762	6208.26	7066.19	8005.29	8800.21	9297.68
1763	6212.15	7070.91	8010.77	8805.99	9303.45
1764	6215.92	7075.54	8016.18	8811.73	9309.23
1765	6219.49	7080.01	8021.49	8817.42	9314.99
1766	6222.81	7084.28	8026.66	8823.03	9320.73
1767	6225.83	7088.32	8031.66	8828.54	9326.45
1768	6228.53	7092.09	8036.47	8833.93	9332.13
1769	6230.89	7095.56	8041.05	8839.18	9337.77

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
1740	5277.903	5359.87	5840.15	6750.18	7755.32
1741	5290.515	5372.47	5851.98	6760.31	7763.54
1742	5302.601	5384.54	5863.32	6770.07	7771.55
1743	5314.631	5395.94	5874.05	6779.40	7779.30
1744	5324.343	5406.21	5883.75	6788.02	7786.70
1745	5333.788	5415.58	5892.87	6798.11	7793.86
1746	5342.315	5424.02	5900.75	6803.66	7800.78
1747	5349.883	5431.46	5907.94	6810.64	7807.46
1748	5356.460	5437.87	5914.21	6817.03	7813.90
1749	5362.037	5443.28	5919.62	6822.86	7820.07
1750	5366.568	5447.77	5924.33	6828.20	7825.96
1751	5370.119	5451.43	5928.43	6833.09	7831.58
1752	5372.840	5454.38	5931.99	6837.58	7836.92
1753	5374.924	5456.74	5935.07	6841.67	7841.98
1754	5376.500	5458.62	5937.72	6845.41	7846.77
1755	5377.679	5460.11	5940.00	6848.83	7851.32
1756	5378.552	5461.26	5941.96	6851.97	7855.65
1757	5379.210	5462.18	5943.66	6854.86	7859.78
1758	5379.725	5462.92	5945.15	6857.57	7863.74
1759	5380.152	5463.53	5946.49	6860.12	7867.58
1760	5380.546	5464.08	5947.72	6862.58	7871.32
1761	5380.928	5464.59	5948.91	6864.97	7875.02
1762	5381.308	5465.10	5950.08	6867.36	7878.71
1763	5381.698	5465.63	5951.30	6869.80	7882.43
1764	5382.111	5466.22	5952.60	6872.32	7886.24
1765	5382.595	5466.92	5954.05	6874.98	7890.16
1766	5383.201	5467.77	5955.67	6877.81	7894.24
1767	5383.992	5468.84	5957.53	6880.86	7898.49
1768	5385.045	5470.19	5959.69	6884.17	7902.95
1769	5386.447	5471.90	5962.18	6887.77	7907.64

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11	LONGERON 11	ROW 12	LONGERON 12	EARTH END	SPACE END
1740	7069.03	6224.74	5675.10	5735.22	3696.04	12023.73
1741	7069.16	6224.87	5675.41	5735.50	3698.00	12028.79
1742	7069.27	6225.00	5675.73	5735.79	3699.97	12034.06
1743	7069.41	6225.15	5676.07	5736.09	3701.95	12039.57
1744	7069.72	6225.38	5676.44	5736.40	3703.95	12045.48
1745	7070.21	6225.70	5676.82	5736.69	3705.98	12051.67
1746	7070.97	6226.15	5677.21	5736.98	3708.04	12058.14
1747	7072.04	6226.76	5677.61	5737.23	3710.13	12064.87
1748	7073.45	6227.52	5678.01	5737.45	3712.24	12071.83
1749	7075.21	6228.46	5678.41	5737.68	3714.39	12078.99
1750	7077.34	6229.52	5678.77	5737.98	3716.55	12086.31
1751	7079.82	6230.74	5679.14	5738.45	3718.73	12093.75
1752	7082.66	6232.19	5679.64	5739.15	3720.92	12101.28
1753	7085.86	6233.94	5680.41	5740.19	3723.13	12108.87
1754	7089.39	6236.05	5681.54	5741.61	3725.33	12116.49
1755	7093.24	6238.52	5683.06	5743.42	3727.54	12124.11
1756	7097.37	6241.36	5684.98	5745.61	3729.74	12131.71
1757	7101.76	6244.53	5687.30	5748.18	3731.94	12139.28
1758	7106.36	6248.01	5689.98	5751.07	3734.14	12146.82
1759	7111.12	6251.75	5692.98	5754.24	3736.33	12154.33
1760	7116.00	6255.67	5696.21	5757.61	3738.51	12161.81
1761	7120.94	6259.71	5699.57	5761.09	3740.70	12169.28
1762	7125.89	6263.75	5702.96	5764.59	3742.88	12176.75
1763	7130.80	6267.71	5706.24	5768.00	3745.07	12184.22
1764	7135.60	6271.51	5709.30	5771.24	3747.26	12191.72
1765	7140.25	6275.07	5712.09	5774.22	3749.45	12199.25
1766	7144.71	6278.35	5714.53	5776.89	3751.65	12206.82
1767	7148.93	6281.30	5716.59	5779.21	3753.85	12214.41
1768	7152.89	6283.91	5718.25	5781.17	3756.06	12222.02
1769	7156.56	6286.17	5719.54	5782.75	3758.26	12229.64

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW	1 LONGERON	1	ROW	2 LONGERON	2	ROW	3 LONGERON	3	ROW	4 LONGERON	4	ROW	5 LONGERON	5
1770	6232.89	7098.72	8045.38	8844.27	9343.34	9265.49	8796.09	7872.54	6853.56	5958.12					
1771	6234.54	7101.56	8049.44	8849.18	9348.84	9271.22	8801.70	7877.69	6857.95	5961.32					
1772	6235.84	7104.08	8053.22	8853.90	9354.24	9276.96	8807.46	7883.08	6862.70	5965.07					
1773	6236.83	7106.26	8056.71	8858.39	9359.53	9282.70	8813.34	7888.70	6867.82	5969.46					
1774	6237.55	7108.14	8059.90	8862.66	9364.70	9288.43	8819.32	7894.54	6873.33	5974.54					
1775	6238.12	7109.80	8062.86	8866.75	9369.76	9294.15	8825.39	7900.55	6879.14	5980.17					
1776	6238.59	7111.25	8065.51	8870.59	9374.67	9299.82	8831.54	7906.76	6885.31	5986.44					
1777	6239.05	7112.52	8067.86	8874.18	9379.44	9305.44	8837.76	7913.17	6891.84	5993.33					
1778	6239.50	7113.64	8069.94	8877.53	9384.05	9311.01	8844.05	7919.78	6898.72	6000.78					
1779	6239.94	7114.62	8071.77	8880.67	9388.51	9316.51	8850.38	7926.55	6905.92	6008.76					
1780	6240.36	7115.46	8073.39	8883.62	9392.85	9321.95	8856.74	7933.48	6913.41	6017.17					
1781	6240.76	7116.21	8074.85	8886.41	9397.07	9327.34	8863.14	7940.53	6921.13	6025.95					
1782	6241.15	7116.89	8076.19	8889.10	9401.21	9332.69	8869.55	7947.69	6929.04	6035.00					
1783	6241.54	7117.53	8077.47	8891.74	9405.32	9338.02	8875.96	7954.90	6937.05	6044.18					
1784	6241.92	7118.17	8078.74	8894.36	9409.41	9343.35	8882.39	7962.11	6945.07	6053.39					
1785	6242.31	7118.83	8080.06	8897.03	9413.54	9348.69	8888.80	7969.29	6953.02	6062.48					
1786	6242.71	7119.56	8081.49	8899.80	9417.74	9354.07	8895.20	7976.37	6960.79	6071.34					
1787	6243.12	7120.39	8083.07	8902.71	9422.05	9359.50	8901.57	7983.33	6968.33	6079.84					
1788	6243.56	7121.34	8084.86	8905.81	9426.49	9364.99	8907.91	7990.13	6975.59	6087.89					
1789	6244.02	7122.44	8086.91	8909.14	9431.08	9370.55	8914.20	7996.76	6982.51	6095.41					
1790	6244.48	7123.79	8089.40	8912.85	9435.92	9376.20	8920.39	8003.07	6988.87	6102.01					
1791	6245.06	7125.48	8092.39	8916.96	9440.99	9381.91	8926.44	8009.06	6994.63	6107.56					
1792	6245.89	7127.50	8095.72	8921.33	9446.22	9387.65	8932.38	8014.80	6999.97	6112.33					
1793	6247.07	7129.88	8099.38	8925.96	9451.58	9393.40	8938.18	8020.28	7004.86	6116.32					
1794	6248.65	7132.66	8103.40	8930.84	9457.06	9399.13	8943.83	8025.47	7009.32	6119.62					
1795	6250.67	7135.84	8107.74	8935.94	9462.64	9404.81	8949.29	8030.36	7013.35	6122.33					
1796	6253.17	7139.44	8112.42	8941.25	9468.29	9410.44	8954.56	8034.94	7016.96	6124.54					
1797	6256.17	7143.45	8117.40	8946.75	9474.01	9415.99	8959.63	8039.20	7020.17	6126.32					
1798	6259.69	7147.88	8122.68	8952.42	9479.77	9421.46	8964.49	8043.14	7023.00	6127.77					
1799	6263.73	7152.71	8128.23	8958.24	9485.55	9426.82	8969.14	8046.77	7025.48	6128.99					

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERRN 6	ROW 7 LONGERRN 7	ROW 8 LONGERRN 8	ROW 9 LONGERRN 9	ROW 10 LONGERRN 10
1770	5388.280	5474.03	5965.05	6891.70	7912.58
1771	5390.650	5476.65	5968.35	6895.97	7917.77
1772	5393.675	5479.87	5972.13	6900.62	7923.22
1773	5397.523	5483.78	5976.42	6905.65	7928.93
1774	5402.265	5488.46	5981.26	6911.09	7934.88
1775	5407.713	5493.75	5986.57	6916.86	7941.02
1776	5414.013	5499.88	5992.60	6923.09	7947.38
1777	5421.115	5506.83	5999.35	6929.79	7953.94
1778	5428.960	5514.56	6006.80	6936.94	7960.70
1779	5437.464	5522.98	6014.86	6944.47	7967.61
1780	5446.532	5531.96	6023.4	6952.34	7974.67
1781	5456.048	5541.41	6032.42	6960.47	7981.85
1782	5465.885	5551.19	6041.69	6968.80	7989.11
1783	5475.896	5561.14	6051.12	6977.23	7996.42
1784	5485.927	5571.12	6060.57	6985.67	8003.74
1785	5495.822	5580.96	6069.89	6994.03	8011.02
1786	5505.428	5590.50	6078.95	7002.22	8018.22
1787	5514.598	5599.59	6087.62	7010.14	8025.30
1788	5523.209	5608.11	6095.77	7017.74	8032.25
1789	5531.143	5615.94	6103.31	7024.95	8039.02
1790	5537.866	5622.50	6109.71	7031.42	8045.49
1791	5543.217	5627.70	6114.96	7037.14	8051.60
1792	5547.544	5632.02	6119.54	7042.39	8057.44
1793	5550.877	5635.50	6123.51	7047.18	8062.99
1794	5553.365	5638.24	6126.90	7051.53	8066.24
1795	5555.168	5640.34	6129.75	7055.44	8073.16
1796	5556.418	5641.89	6132.10	7058.92	8077.75
1797	5557.228	5642.98	6133.98	7061.99	8082.02
1798	5557.735	5643.70	6135.46	7064.68	8085.98
1799	5558.106	5644.18	6136.59	7067.02	8089.62

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11	LONG	ROW 11	ROW 12	LONG	ROW 12	EARTH	SPACE	END
1770	7159.91	6288.08	5720.47	5783.98	3760.47	12237.25			
1771	7162.94	6289.68	5721.10	5784.83	3762.67	12244.82			
1772	7165.64	6291.02	5721.52	5785.42	3764.86	12252.32			
1773	7168.01	6292.18	5721.87	5785.83	3767.03	12259.73			
1774	7170.06	6293.22	5722.24	5786.11	3769.19	12267.02			
1775	7171.87	6294.17	5722.64	5786.34	3771.34	12274.20			
1776	7173.37	6294.99	5723.04	5786.55	3773.46	12281.21			
1777	7174.59	6295.67	5723.44	5786.79	3775.56	12288.05			
1778	7175.57	6296.23	5723.83	5787.06	3777.64	12294.71			
1779	7176.34	6296.68	5724.23	5787.34	3779.70	12301.19			
1780	7176.94	6297.06	5724.61	5787.64	3781.74	12307.50			
1781	7177.42	6297.37	5724.99	5787.93	3783.77	12313.67			
1782	7177.82	6297.65	5725.37	5788.23	3785.79	12319.74			
1783	7178.19	6297.91	5725.74	5788.54	3787.80	12325.75			
1784	7178.56	6298.16	5726.11	5788.84	3789.82	12331.75			
1785	7178.94	6298.43	5726.48	5789.14	3791.83	12337.80			
1786	7179.39	6298.74	5726.86	5789.44	3793.86	12343.94			
1787	7179.97	6299.10	5727.25	5789.73	3795.90	12350.22			
1788	7180.70	6299.54	5727.64	5790.02	3797.96	12356.67			
1789	7181.65	6300.08	5728.04	5790.29	3800.03	12363.30			
1790	7183.00	6300.82	5728.44	5790.51	3802.15	12370.23			
1791	7184.86	6301.79	5728.83	5790.75	3804.29	12377.42			
1792	7187.04	6302.88	5729.18	5791.08	3806.46	12384.77			
1793	7189.61	6304.14	5729.56	5791.59	3808.64	12392.24			
1794	7192.58	6305.69	5730.15	5792.40	3810.84	12399.79			
1795	7195.95	6307.62	5731.10	5793.63	3813.05	12407.40			
1796	7199.74	6310.02	5732.54	5795.37	3815.25	12415.02			
1797	7203.94	6312.95	5734.56	5797.66	3817.45	12422.62			
1798	7208.55	6316.45	5737.28	5800.58	3819.65	12430.15			
1799	7213.56	6320.60	5740.79	5804.19	3821.83	12437.60			

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1800	6268.29	7157.93	8134.04	8964.18	9491.33
1801	6273.39	7163.52	8140.05	8970.22	9437.11
1802	6279.03	7169.48	8146.26	8976.33	9442.22
1803	6284.93	7175.61	8152.54	8982.48	9447.19
1804	6291.32	7182.05	8158.96	8986.67	9514.33
1805	6298.08	7188.73	8165.48	8994.89	9520.03
1806	6305.10	7195.58	8172.07	9001.14	9525.71
1807	6312.24	7202.50	8178.70	9007.40	9531.38
1808	6319.38	7209.42	8185.32	9013.65	9537.06
1809	6326.37	7216.25	8191.91	9019.90	9542.74
1810	6333.10	7222.91	8198.42	9026.12	9548.44
1811	6339.44	7229.32	8204.83	9032.31	9554.17
1812	6345.32	7235.44	8211.11	9038.45	9559.91
1813	6350.68	7241.21	8217.22	9044.53	9565.68
1814	6355.54	7246.64	8223.15	9050.52	9571.46
1815	6359.91	7251.71	8228.86	9056.42	9577.24
1816	6363.80	7256.43	8234.33	9062.20	9583.02
1817	6367.21	7260.78	8239.56	9067.84	9588.77
1818	6370.17	7264.76	8244.52	9073.33	9594.48
1819	6372.71	7268.39	8249.22	9078.65	9600.14
1820	6374.84	7271.67	8253.64	9083.81	9605.74
1821	6376.62	7274.63	8257.81	9088.78	9611.26
1822	6378.07	7277.29	8261.72	9093.59	9616.71
1823	6379.25	7279.68	8265.39	9098.22	9622.07
1824	6380.21	7281.82	8268.84	9102.69	9627.35
1825	6380.99	7283.78	8272.11	9107.02	9632.55
1826	6381.65	7285.58	8275.22	9111.22	9637.68
1827	6382.23	7287.27	8278.20	9115.33	9642.76
1828	6382.77	7288.90	8281.11	9119.38	9647.80
1829	6383.30	7290.50	8283.99	9123.41	9652.82

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGRRN 6	ROW 7 LONGRRN 7	ROW 8 LONGRRN 8	ROW 9 LONGRRN 9	ROW 10 LONGRRN 10
1800	5558.462	5644.51	6137.42	7069.04	8092.97
1801	5558.847	5644.76	6138.04	7070.80	8096.04
1802	5559.250	5644.97	6138.54	7072.35	8098.86
1803	5559.652	5645.19	6139.03	7073.84	8101.57
1804	5560.053	5645.41	6139.48	7075.20	8104.08
1805	5560.452	5645.65	6139.94	7076.47	8106.44
1806	5560.850	5645.89	6140.39	7077.68	8108.69
1807	5561.248	5646.15	6140.84	7078.87	8110.90
1808	5561.646	5646.40	6141.30	7080.06	8113.11
1809	5562.045	5646.65	6141.75	7081.28	8115.38
1810	5562.445	5646.88	6142.20	7082.56	8117.75
1811	5562.845	5647.10	6142.66	7083.92	8120.27
1812	5563.247	5647.32	6143.15	7085.41	8122.99
1813	5563.651	5647.54	6143.69	7087.06	8125.94
1814	5564.020	5647.82	6144.39	7088.93	8129.13
1815	5564.375	5648.19	6145.33	7091.06	8132.58
1816	5564.788	5648.73	6146.55	7093.50	8136.32
1817	5565.320	5649.52	6148.10	7096.26	8140.33
1818	5566.158	5650.64	6150.02	7099.37	8144.63
1819	5567.373	5652.16	6152.33	7102.82	8149.20
1820	5569.030	5654.11	6155.06	7106.62	8154.04
1821	5571.190	5656.55	6158.19	7110.76	8159.14
1822	5573.908	5659.49	6161.76	7115.24	8164.47
1823	5577.235	5662.97	6165.72	7120.03	8170.02
1824	5581.184	5666.96	6170.07	7125.11	8175.75
1825	5585.699	5671.44	6174.77	7130.44	8181.65
1826	5590.688	5676.33	6179.77	7135.99	8187.67
1827	5596.040	5681.54	6185.02	7141.71	8193.78
1828	5601.620	5686.95	6190.43	7147.54	8199.95
1829	5607.286	5692.45	6195.91	7153.42	8206.15

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1800	7218.95	6325.42	5745.16	5808.52
1801	7224.68	6330.87	5750.35	5813.56
1802	7230.72	6336.87	5756.26	5819.27
1803	7236.90	6343.10	5762.48	5825.29
1804	7243.32	6349.75	5769.23	5831.86
1805	7249.92	6356.70	5776.40	5838.85
1806	7256.66	6363.87	5783.84	5846.13
1807	7263.45	6371.14	5791.41	5853.54
1808	7270.24	6378.40	5798.97	5860.95
1809	7276.96	6385.54	5806.38	5868.19
1810	7283.54	6392.47	5813.50	5875.14
1811	7289.94	6399.08	5820.21	5881.67
1812	7296.11	6405.29	5826.41	5887.66
1813	7302.00	6411.03	5831.98	5893.04
1814	7307.58	6416.21	5836.81	5897.77
1815	7312.83	6420.78	5840.86	5901.83
1816	7317.72	6424.73	5844.12	5905.23
1817	7322.26	6428.12	5846.70	5908.02
1818	7326.43	6431.00	5848.68	5910.27
1819	7330.25	6433.44	5850.15	5912.04
1820	7333.72	6435.48	5851.21	5913.38
1821	7336.87	6437.19	5851.95	5914.38
1822	7339.72	6438.64	5852.44	5915.09
1823	7342.29	6439.90	5852.83	5915.60
1824	7344.62	6441.05	5853.18	5915.99
1825	7346.75	6442.12	5853.54	5916.29
1826	7348.72	6443.12	5853.92	5916.55
1827	7350.56	6444.09	5854.31	5916.79
1828	7352.32	6445.02	5854.71	5917.01
1829	7354.05	6445.94	5855.11	5917.23

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1830	6383.83	7292.12	8286.89	9127.44	9590.91
1831	6384.45	7293.87	8289.94	9131.61	9596.63
1832	6385.18	7295.75	8293.14	9135.88	9602.37
1833	6386.07	7297.82	8296.52	9140.30	9673.38
1834	6387.17	7300.13	8300.12	9144.88	9678.72
1835	6388.55	7302.71	8303.97	9149.63	9684.14
1836	6390.26	7305.61	8308.08	9154.58	9689.65
1837	6392.35	7308.85	8312.48	9159.71	9695.24
1838	6394.88	7312.48	8317.17	9165.04	9700.90
1839	6397.90	7316.51	8322.17	9170.54	9706.62
1840	6401.45	7320.97	8327.47	9176.23	9712.38
1841	6405.59	7325.87	8333.07	9182.07	9718.16
1842	6410.36	7331.24	8338.96	9188.05	9723.94
1843	6415.87	7337.11	8345.12	9194.15	9729.70
1844	6422.25	7343.55	8351.54	9200.34	9735.42
1845	6429.50	7350.54	8358.19	9206.60	9741.09
1846	6437.56	7358.05	8365.06	9212.93	9746.69
1847	6446.34	7366.03	8372.13	9219.30	9752.21
1848	6455.78	7374.43	8379.39	9225.71	9757.66
1849	6465.76	7383.21	8386.83	9232.17	9763.03
1850	6476.17	7392.28	8394.42	9238.66	9768.35
1851	6486.88	7401.56	8402.12	9245.18	9773.62
1852	6497.72	7410.94	8409.87	9251.71	9778.87
1853	6508.54	7420.30	8417.61	9258.24	9784.13
1854	6519.19	7429.53	8425.29	9264.75	9789.41
1855	6529.51	7438.54	8432.84	9271.23	9794.74
1856	6539.39	7447.24	8440.25	9277.68	9800.13
1857	6548.71	7455.58	8447.48	9284.09	9805.59
1858	6557.40	7463.49	8454.52	9290.45	9811.12
1859	6565.39	7470.96	8461.37	9296.77	9816.73

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1830	5612.904	5697.90	6201.35	7159.27	8212.33
1831	5618.060	5702.94	6206.47	7164.89	8218.39
1832	5622.775	5707.59	6211.29	7170.32	8224.34
1833	5626.939	5711.76	6215.77	7175.49	8230.14
1834	5630.470	5715.41	6219.86	7180.38	8235.75
1835	5633.341	5718.49	6223.53	7184.95	8241.14
1836	5635.609	5721.02	6226.76	7189.16	8246.29
1837	5637.320	5723.03	6229.52	7193.00	8251.16
1838	5638.538	5724.56	6231.84	7196.45	8255.73
1839	5639.334	5725.63	6233.71	7199.51	8259.99
1840	5639.824	5726.33	6235.16	7202.18	8263.92
1841	5640.187	5726.78	6236.23	7204.45	8267.51
1842	5640.552	5727.07	6236.97	7206.36	8270.75
1843	5640.955	5727.29	6237.49	7207.96	8273.62
1844	5641.356	5727.51	6237.95	7209.32	8276.14
1845	5641.753	5727.77	6238.40	7210.49	8278.30
1846	5642.145	5728.05	6238.84	7211.46	8280.14
1847	5642.527	5728.35	6239.25	7212.25	8281.67
1848	5642.899	5728.65	6239.63	7212.89	8282.95
1849	5643.259	5728.95	6239.99	7213.40	8284.02
1850	5643.608	5729.25	6240.33	7213.83	8284.95
1851	5643.950	5729.55	6240.66	7214.20	8285.78
1852	5644.288	5729.85	6240.99	7214.55	8286.57
1853	5644.627	5730.15	6241.31	7214.90	8287.36
1854	5644.970	5730.45	6241.64	7215.28	8288.21
1855	5645.322	5730.75	6241.99	7215.73	8289.17
1856	5645.685	5731.06	6242.35	7216.27	8290.28
1857	5646.058	5731.36	6242.74	7216.93	8291.60
1858	5646.442	5731.65	6243.15	7217.74	8293.17
1859	5646.834	5731.93	6243.59	7218.73	8295.03

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1830	7355.80	6446.87	5855.52	5917.45
1831	7357.71	6447.86	5855.90	5917.70
1832	7359.77	6448.90	5856.26	5917.99
1833	7362.02	6450.02	5856.62	5918.34
1834	7364.51	6451.24	5856.99	5918.80
1835	7367.28	6452.63	5857.44	5919.45
1836	7370.37	6454.28	5858.12	5920.38
1837	7373.81	6456.28	5859.13	5921.69
1838	7377.62	6458.71	5860.61	5923.45
1839	7381.84	6461.66	5862.66	5925.77
1840	7386.48	6465.21	5865.42	5928.73
1841	7391.56	6469.48	5869.09	5932.47
1842	7397.09	6474.55	5873.79	5937.09
1843	7403.06	6480.44	5879.55	5942.65
1844	7409.47	6487.07	5886.29	5949.20
1845	7416.32	6494.42	5893.98	5956.73
1846	7423.59	6502.46	5902.53	5965.17
1847	7431.28	6511.13	5911.89	5974.43
1848	7439.36	6520.39	5921.95	5984.42
1849	7447.83	6530.15	5932.61	5995.01
1850	7456.60	6540.33	5943.74	6006.08
1851	7465.60	6550.79	5955.18	6017.48
1852	7474.72	6561.39	5966.77	6029.03
1853	7483.81	6571.96	5978.35	6040.56
1854	7492.77	6582.37	5989.72	6051.88
1855	7501.48	6592.46	6000.75	6062.86
1856	7509.86	6602.12	6011.30	6073.33
1857	7517.88	6611.28	6021.24	6083.19
1858	7525.51	6619.86	6030.49	6092.34
1859	7532.74	6627.84	6038.97	6100.70

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1860	6572.62	7477.93	8468.02	9303.03	9734.16
1861	6579.03	7484.39	8474.44	9309.23	9822.39
1862	6584.66	7490.34	8480.64	9315.34	9828.11
1863	6589.60	7495.83	8486.60	9321.35	9833.87
1864	6593.69	7500.69	8492.18	9327.18	9845.43
1865	6597.29	7505.19	8497.50	9332.88	9851.19
1866	6600.46	7509.34	8502.59	9338.44	9856.92
1867	6603.24	7513.18	8507.44	9343.86	9862.82
1868	6605.70	7516.74	8512.09	9349.15	9868.27
1869	6607.88	7520.06	8516.54	9354.33	9873.87
1870	6609.83	7523.18	8520.84	9359.39	9879.43
1871	6611.61	7526.14	8525.01	9364.37	9884.98
1872	6613.26	7528.99	8529.08	9369.29	9890.46
1873	6614.85	7531.78	8533.10	9374.17	9895.94
1874	6616.42	7534.55	8537.11	9379.04	9901.42
1875	6618.03	7537.35	8541.14	9383.93	9906.90
1876	6619.71	7540.22	8545.23	9388.86	9912.41
1877	6621.53	7543.22	8549.44	9393.86	9917.95
1878	6623.55	7546.40	8553.78	9398.96	9923.52
1879	6625.80	7549.79	8558.29	9404.17	9929.14
1880	6628.36	7553.43	8562.99	9409.50	9934.80
1881	6631.27	7557.38	8567.93	9414.97	9940.51
1882	6634.59	7561.65	8573.10	9420.58	9946.28
1883	6638.39	7566.30	8578.53	9426.33	9952.03
1884	6642.70	7571.33	8584.21	9432.22	9957.81
1885	6647.63	7576.81	8590.17	9438.23	9963.59
1886	6653.28	7582.77	8596.37	9444.34	9969.34
1887	6659.80	7589.30	8602.83	9450.55	9975.06
1888	6667.23	7596.40	8609.53	9456.82	9980.71
1889	6675.51	7604.06	8616.46	9463.16	9986.29

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
1860	5647.232	5732.19	6244.05	7219.90	8297.21
1861	5647.632	5732.42	6244.51	7221.26	8299.71
1862	5648.035	5732.63	6245.01	7222.82	8302.53
1863	5648.410	5732.90	6245.69	7224.64	8305.68
1864	5648.777	5733.36	6246.78	7226.95	8309.30
1865	5649.246	5734.03	6248.20	7229.59	8313.20
1866	5649.941	5734.99	6249.94	7232.53	8317.37
1867	5650.921	5736.27	6252.02	7235.77	8321.78
1868	5652.217	5737.87	6254.41	7239.29	8326.40
1869	5653.824	5739.78	6257.09	7243.05	8331.21
1870	5655.723	5741.97	6260.02	7247.02	8336.18
1871	5657.877	5744.40	6263.15	7251.16	8341.28
1872	5660.226	5747.00	6266.44	7255.42	8346.46
1873	5662.696	5749.72	6269.81	7259.76	8351.69
1874	5665.196	5752.47	6273.21	7264.11	8356.94
1875	5667.641	5755.17	6276.57	7268.43	8362.16
1876	5669.943	5757.74	6279.82	7272.67	8367.32
1877	5672.030	5760.10	6282.90	7276.77	8372.38
1878	5673.848	5762.21	6285.76	7280.68	8377.31
1879	5675.361	5764.03	6288.36	7284.37	8382.07
1880	5676.554	5765.53	6290.65	7287.80	8386.63
1881	5677.430	5766.69	6292.61	7290.94	8390.95
1882	5678.034	5767.54	6294.23	7293.77	8395.03
1883	5678.442	5768.12	6295.52	7296.28	8398.82
1884	5678.797	5768.51	6296.48	7298.44	8402.30
1885	5679.170	5768.77	6297.16	7300.28	8405.46
1886	5679.573	5768.99	6297.66	7301.83	8408.27
1887	5679.973	5769.22	6298.12	7303.16	8410.73
1888	5680.370	5769.48	6298.58	7304.28	8412.82
1889	5680.759	5769.77	6299.01	7305.20	8414.56

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1860	7539.57	6635.17	6046.62	3951.15
1861	7546.01	6641.84	6053.41	3953.26
1862	7552.04	6647.83	6059.30	3955.39
1863	7557.68	6653.11	6064.27	3957.55
1864	7562.72	6657.31	6067.86	3959.73
1865	7567.40	6660.91	6070.69	3961.92
1866	7571.74	6664.02	6072.93	3964.12
1867	7575.77	6666.72	6074.70	3966.33
1868	7579.52	6669.08	6076.09	3968.53
1869	7583.03	6671.16	6077.19	3970.74
1870	7586.34	6673.03	6078.07	3972.94
1871	7589.49	6674.74	6078.81	3975.14
1872	7592.53	6676.36	6079.45	3977.34
1873	7595.51	6677.91	6080.04	3979.54
1874	7598.47	6679.45	6080.61	3981.74
1875	7601.45	6681.02	6081.21	3983.94
1876	7604.52	6682.65	6081.87	3986.14
1877	7607.71	6684.40	6082.65	3988.34
1878	7611.08	6686.33	6083.59	3990.54
1879	7614.66	6688.49	6084.77	3992.75
1880	7618.49	6690.95	6086.27	3994.95
1881	7622.63	6693.78	6088.19	3997.16
1882	7627.09	6697.06	6090.63	3999.36
1883	7631.91	6700.89	6093.75	4001.54
1884	7637.12	6705.40	6097.72	4003.72
1885	7642.75	6710.65	6102.65	4005.87
1886	7648.80	6716.66	6108.58	4008.01
1887	7655.28	6723.41	6115.48	4010.11
1888	7662.21	6730.91	6123.34	4012.20
1889	7669.61	6739.15	6132.15	4014.25

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1890	6684.63	7612.26	8623.63	9469.55	9991.77
1891	6694.54	7620.98	8631.04	9476.00	9997.16
1892	6705.19	7630.22	8638.72	9482.52	10002.44
1893	6716.50	7639.94	8646.66	9489.10	10007.62
1894	6728.38	7650.08	8654.85	9495.75	10012.72
1895	6740.69	7660.56	8663.25	9502.46	10017.75
1896	6753.19	7671.18	8671.75	9509.20	10022.74
1897	6765.85	7681.94	8680.33	9515.97	10027.72
1898	6778.46	7692.65	8688.88	9522.72	10032.70
1899	6790.84	7703.18	8697.32	9529.45	10037.71
1900	6802.82	7713.40	8705.56	9536.11	10042.79
1901	6813.93	7722.97	8713.41	9542.67	10048.01
1902	6824.00	7731.81	8720.88	9549.13	10053.37
1903	6833.29	7740.12	8728.10	9555.54	10058.83
1904	6841.76	7747.89	8735.08	9561.89	10064.39
1905	6849.39	7755.13	8741.84	9568.18	10070.03
1906	6856.12	7761.79	8748.35	9574.40	10075.73
1907	6861.99	7767.89	8754.62	9580.54	10081.48
1908	6867.09	7773.49	8760.64	9586.58	10087.25
1909	6871.56	7778.64	8766.40	9592.50	10093.03
1910	6875.51	7783.40	8771.91	9598.30	10098.81
1911	6878.98	7787.80	8777.17	9603.95	10104.57
1912	6882.04	7791.86	8782.19	9609.48	10110.29
1913	6884.74	7795.63	8786.99	9614.87	10115.97
1914	6887.14	7799.14	8791.59	9620.13	10121.61
1915	6889.29	7802.43	8796.03	9625.29	10127.21
1916	6891.24	7805.56	8800.33	9630.36	10132.78
1917	6893.06	7808.55	8804.53	9635.36	10138.31
1918	6894.80	7811.48	8808.66	9640.32	10143.83
1919	6896.50	7814.37	8812.77	9645.26	10149.34

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1890	5681.136	5770.07	6299.40	7305.91	8415.96
1891	5681.498	5770.37	6299.76	7306.44	8417.06
1892	5681.841	5770.67	6300.10	7306.82	8417.91
1893	5682.164	5770.97	6300.40	7307.09	8418.57
1894	5682.468	5771.25	6300.69	7307.28	8419.08
1895	5682.756	5771.52	6300.96	7307.42	8419.51
1896	5683.035	5771.79	6301.22	7307.54	8419.90
1897	5683.309	5772.05	6301.48	7307.64	8420.27
1898	5683.584	5772.31	6301.74	7307.75	8420.64
1899	5683.868	5772.58	6302.00	7307.88	8421.06
1900	5684.168	5772.86	6302.28	7308.06	8421.55
1901	5684.498	5773.15	6302.60	7308.36	8422.26
1902	5684.856	5773.46	6302.95	7308.86	8423.31
1903	5685.230	5773.76	6303.34	7309.53	8424.64
1904	5685.617	5774.05	6303.76	7310.40	8426.30
1905	5688.012	5774.32	6304.22	7311.48	8428.31
1906	5688.412	5774.56	6304.68	7312.76	8430.69
1907	5688.814	5774.77	6305.16	7314.25	8433.41
1908	5688.199	5775.02	6305.78	7316.01	8436.48
1909	5688.554	5775.37	6306.65	7318.08	8439.87
1910	5688.936	5775.88	6307.84	7320.48	8443.57
1911	5688.463	5776.63	6309.35	7323.20	8447.55
1912	5689.232	5777.68	6311.19	7326.23	8451.79
1913	5689.289	5779.03	6313.34	7329.54	8456.25
1914	5691.649	5780.70	6315.79	7333.11	8460.92
1915	5693.290	5782.64	6318.50	7336.90	8465.75
1916	5695.181	5784.82	6321.42	7340.86	8470.72
1917	5697.273	5787.19	6324.51	7344.96	8475.78
1918	5699.495	5789.69	6327.69	7349.15	8480.91
1919	5701.770	5792.23	6330.92	7353.36	8486.05

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1890	7677.50	6748.11	6141.87	6207.05
1891	7685.91	6757.81	6152.45	6217.56
1892	7694.86	6768.21	6163.83	6228.89
1893	7704.37	6779.28	6175.93	6240.96
1894	7714.39	6790.93	6188.63	6253.64
1895	7724.83	6803.04	6201.80	6266.78
1896	7735.46	6815.36	6215.17	6280.13
1897	7746.28	6827.85	6228.70	6293.65
1898	7757.00	6840.28	6242.19	6307.12
1899	7767.51	6852.47	6255.43	6320.34
1900	7777.62	6864.23	6268.24	6333.12
1901	7786.96	6875.09	6280.13	6344.97
1902	7795.48	6884.94	6290.88	6355.66
1903	7803.48	6894.06	6300.79	6365.48
1904	7810.98	6902.46	6309.79	6374.39
1905	7818.02	6910.13	6317.88	6382.34
1906	7824.61	6917.06	6325.01	6389.30
1907	7830.77	6923.26	6331.18	6395.27
1908	7836.50	6928.71	6336.38	6400.32
1909	7841.83	6933.42	6340.61	6404.53
1910	7846.77	6937.45	6343.97	6408.01
1911	7851.35	6940.90	6346.62	6410.87
1912	7855.59	6943.89	6348.72	6413.23
1913	7859.55	6946.49	6350.38	6415.18
1914	7863.25	6948.79	6351.71	6416.80
1915	7866.74	6950.84	6352.78	6418.16
1916	7870.05	6952.72	6353.67	6419.33
1917	7873.24	6954.47	6354.44	6420.36
1918	7876.35	6956.15	6355.14	6421.32
1919	7879.44	6957.80	6355.82	6422.24

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1920	6898.22	7817.28	8816.89	9650.22	10154.85
1921	6900.01	7820.25	8821.07	9655.20	10160.38
1922	6901.93	7823.34	8825.35	9660.26	10165.94
1923	6904.03	7826.59	8829.74	9665.39	10171.53
1924	6906.33	7830.02	8834.29	9670.62	10177.15
1925	6909.07	7833.82	8839.11	9676.02	10182.84
1926	6912.16	7837.91	8844.15	9681.55	10188.57
1927	6915.66	7842.33	8849.42	9687.22	10194.33
1928	6919.63	7847.11	8854.94	9693.02	10200.10
1929	6924.13	7852.28	8860.71	9698.95	10205.89
1930	6929.22	7857.87	8866.73	9704.99	10211.66
1931	6935.04	7863.94	8872.99	9711.12	10217.41
1932	6941.68	7870.54	8879.48	9717.33	10223.12
1933	6949.16	7877.68	8886.19	9723.62	10228.77
1934	6957.41	7885.32	8893.11	9729.95	10234.35
1935	6966.40	7893.42	8900.24	9736.34	10239.85
1936	6976.05	7901.97	8907.57	9742.77	10245.26
1937	6986.30	7910.93	8915.10	9749.24	10250.60
1938	6997.05	7920.24	8922.81	9755.77	10255.87
1939	7008.16	7929.82	8930.67	9762.33	10261.08
1940	7019.50	7939.56	8938.63	9768.91	10266.26
1941	7030.91	7949.34	8946.61	9775.50	10271.43
1942	7042.20	7959.04	8954.54	9782.08	10276.61
1943	7053.21	7968.55	8962.36	9788.63	10281.84
1944	7063.81	7977.75	8970.01	9795.14	10287.13
1945	7073.86	7986.57	8977.48	9801.60	10292.50
1946	7083.27	7994.96	8984.73	9808.01	10297.94
1947	7091.95	8002.87	8991.77	9814.37	10303.48
1948	7099.84	8010.27	8998.60	9820.69	10309.09
1949	7106.86	8017.11	9005.19	9826.93	10314.78

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1920	5704.013	5794.74	6334.13	7357.56	8491.19
1921	5706.144	5797.15	6337.24	7361.68	8496.27
1922	5708.089	5799.38	6340.21	7365.69	8501.26
1923	5709.797	5801.39	6342.97	7369.52	8506.13
1924	5711.259	5803.15	6345.52	7373.18	8510.86
1925	5712.284	5804.48	6347.64	7376.46	8515.30
1926	5713.029	5805.49	6349.45	7379.46	8519.52
1927	5713.540	5806.22	6350.94	7382.16	8523.48
1928	5713.919	5806.73	6352.10	7384.54	8527.16
1929	5714.274	5807.07	6352.97	7386.60	8530.54
1930	5714.659	5807.32	6353.59	7388.36	8533.62
1931	5715.061	5807.53	6354.08	7389.87	8536.36
1932	5715.461	5807.76	6354.53	7391.17	8538.77
1933	5715.857	5808.03	6354.99	7392.28	8540.85
1934	5716.247	5808.32	6355.42	7393.20	8542.60
1935	5716.626	5808.62	6355.82	7393.95	8544.05
1936	5716.993	5808.92	6356.20	7394.53	8545.24
1937	5717.347	5809.22	6356.54	7394.99	8546.22
1938	5717.688	5809.52	6356.87	7395.36	8547.04
1939	5718.017	5809.82	6357.19	7395.66	8547.75
1940	5718.340	5810.11	6357.49	7395.92	8548.40
1941	5718.660	5810.40	6357.79	7396.18	8549.03
1942	5718.985	5810.69	6358.10	7396.45	8549.69
1943	5719.317	5810.99	6358.42	7396.77	8550.43
1944	5719.662	5811.29	6358.75	7397.16	8551.30
1945	5720.021	5811.59	6359.11	7397.66	8552.35
1946	5720.393	5811.90	6359.49	7398.30	8553.63
1947	5720.777	5812.19	6359.90	7399.12	8555.21
1948	5721.170	5812.47	6360.35	7400.14	8557.11
1949	5721.568	5812.72	6360.80	7401.35	8559.37

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1920	7882.54	6959.46	6356.51	6423.19
1921	7885.70	6961.19	6357.25	6424.20
1922	7888.99	6963.03	6358.11	6425.33
1923	7892.42	6965.04	6359.13	6426.63
1924	7896.04	6967.24	6360.36	6428.15
1925	7900.03	6969.88	6362.06	6430.14
1926	7904.36	6972.91	6364.21	6432.54
1927	7908.91	6976.40	6366.90	6435.45
1928	7913.87	6980.46	6370.31	6438.96
1929	7919.21	6985.19	6374.56	6443.20
1930	7924.94	6990.64	6379.75	6448.24
1931	7931.07	6996.80	6385.87	6454.16
1932	7937.61	7003.65	6392.90	6461.01
1933	7944.58	7011.19	6400.82	6468.79
1934	7951.95	7019.40	6409.59	6477.45
1935	7959.76	7028.24	6419.16	6486.93
1936	7967.99	7037.70	6429.47	6497.16
1937	7976.65	7047.72	6440.42	6508.05
1938	7985.68	7058.22	6451.91	6519.50
1939	7995.02	7069.09	6463.79	6531.35
1940	8004.55	7080.19	6475.92	6543.44
1941	8014.14	7091.34	6488.12	6555.60
1942	8023.62	7102.39	6500.19	6567.64
1943	8032.88	7113.16	6511.97	6579.38
1944	8041.80	7123.51	6523.30	6590.66
1945	8050.31	7133.35	6534.04	6601.33
1946	8058.38	7142.58	6544.07	6611.28
1947	8066.00	7151.16	6553.31	6620.42
1948	8073.18	7159.05	6561.68	6628.67
1949	8079.91	7166.21	6569.12	6635.95

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
1950	7112.98	8023.38	9011.53	9833.10	10320.51
1951	7118.25	8029.10	9017.62	9839.16	10326.28
1952	7122.83	8034.32	9023.42	9845.11	10332.06
1953	7126.79	8039.09	9028.93	9850.90	10337.84
1954	7130.19	8043.43	9034.15	9856.54	10343.59
1955	7132.91	8047.22	9038.97	9861.94	10349.28
1956	7135.20	8050.63	9043.50	9867.16	10354.90
1957	7137.10	8053.71	9047.76	9872.20	10360.45
1958	7138.67	8056.48	9051.76	9877.07	10365.93
1959	7139.98	8058.99	9055.54	9881.78	10371.33
1960	7141.06	8061.27	9059.12	9886.35	10378.66
1961	7141.98	8063.38	9062.54	9890.79	10381.92
1962	7142.78	8065.36	9065.83	9895.14	10387.13
1963	7143.52	8067.25	9069.04	9899.42	10392.31
1964	7144.22	8069.11	9072.21	9903.68	10397.47
1965	7144.94	8070.99	9075.39	9907.94	10402.63
1966	7145.70	8072.91	9078.63	9912.25	10407.82
1967	7146.54	8074.93	9081.97	9916.63	10413.05
1968	7147.51	8077.10	9085.44	9921.11	10418.33
1969	7148.66	8079.45	9089.08	9925.72	10423.69
1970	7150.04	8082.03	9092.93	9930.48	10429.11
1971	7151.69	8084.88	9097.00	9935.40	10434.61
1972	7153.67	8088.02	9101.31	9940.47	10440.18
1973	7156.01	8091.49	9105.88	9945.72	10445.81
1974	7158.76	8095.30	9110.71	9951.13	10451.50
1975	7161.96	8099.47	9115.81	9958.70	10457.23
1976	7165.63	8104.02	9121.18	9962.42	10463.00
1977	7169.80	8108.95	9126.79	9968.27	10468.78
1978	7174.49	8114.26	9132.65	9974.23	10474.56
1979	7179.74	8119.95	9138.72	9980.29	10480.33
					10332.53
					9748.10
					8680.95
					7476.02
					6443.02

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON	ROW 7 LONGERON	ROW 8 LONGERON	ROW 9 LONGERON	ROW 10 LONGERON
1950	5721.969	5812.94	6361.27	7402.78	8561.99
1951	5722.367	5813.17	6361.84	7404.46	8564.97
1952	5722.724	5813.49	6362.67	7406.47	8568.32
1953	5723.104	5814.00	6363.84	7408.86	8572.01
1954	5723.666	5814.80	6365.40	7411.64	8576.03
1955	5724.700	5816.13	6367.53	7414.93	8580.48
1956	5726.180	5817.91	6370.10	7418.59	8585.22
1957	5728.150	5820.17	6373.09	7422.61	8590.22
1958	5730.647	5822.92	6376.48	7426.97	8595.47
1959	5733.681	5826.14	6380.27	7431.62	8600.92
1960	5737.266	5829.83	6384.39	7436.53	8606.55
1961	5741.329	5833.92	6388.81	7441.66	8612.31
1962	5745.763	5838.33	6393.45	7446.96	8618.18
1963	5750.444	5842.95	6398.26	7452.37	8624.12
1964	5755.237	5847.67	6403.14	7457.83	8630.09
1965	5760.000	5852.36	6407.99	7463.27	8636.05
1966	5764.599	5856.91	6412.74	7468.64	8641.97
1967	5768.905	5861.21	6417.31	7473.88	8647.80
1968	5772.806	5865.17	6421.63	7478.94	8653.52
1969	5776.214	5868.71	6425.64	7483.77	8659.10
1970	5779.085	5871.79	6429.31	7488.34	8664.49
1971	5781.443	5874.41	6432.61	7492.61	8669.68
1972	5783.308	5876.56	6435.51	7496.55	8674.63
1973	5784.722	5878.28	6438.01	7500.17	8679.33
1974	5785.732	5879.59	6440.12	7503.44	8683.76
1975	5786.410	5880.53	6441.84	7506.36	8687.91
1976	5786.854	5881.17	6443.21	7508.95	8691.77
1977	5787.215	5881.60	6444.26	7511.20	8695.34
1978	5787.576	5881.90	6445.03	7513.16	8698.62
1979	5787.972	5882.14	6445.60	7514.85	8701.61

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1950	8086.20	7172.63	6575.58	6642.21
1951	8092.04	7178.28	6581.03	6647.48
1952	8097.43	7183.11	6585.41	6651.82
1953	8102.38	7187.15	6588.79	6655.32
1954	8106.90	7190.53	6591.35	6658.10
1955	8110.88	7193.16	6593.04	6660.08
1956	8114.48	7195.34	6594.25	6661.58
1957	8117.75	7197.17	6595.09	6662.69
1958	8120.71	7198.71	6595.67	6663.50
1959	8123.40	7200.04	6596.09	6664.09
1960	8125.88	7201.26	6596.45	6664.55
1961	8128.17	7202.39	6596.80	6664.92
1962	8130.32	7203.46	6597.16	6665.23
1963	8132.39	7204.51	6597.52	6665.52
1964	8134.43	7205.54	6597.89	6665.80
1965	8136.47	7206.57	6598.26	6666.08
1966	8138.57	7207.63	6598.62	6666.38
1967	8140.77	7208.72	6598.97	6666.71
1968	8143.12	7209.88	6599.33	6667.10
1969	8145.66	7211.13	6599.70	6667.60
1970	8148.43	7212.51	6600.16	6668.25
1971	8151.47	7214.12	6600.79	6669.13
1972	8154.80	7216.01	6601.70	6670.31
1973	8158.45	7218.26	6602.97	6671.88
1974	8162.45	7220.92	6604.70	6673.89
1975	8166.81	7224.06	6606.98	6676.41
1976	8171.54	7227.74	6609.90	6679.52
1977	8176.65	7232.05	6613.62	6683.30
1978	8182.12	7237.03	6618.20	6687.81
1979	8187.95	7242.65	6623.61	6693.05

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CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON	ROW 2 LONGERON	ROW 3 LONGERON	ROW 4 LONGERON	ROW 5 LUNGERUN
980	9144.99	9986.43	10486.08	10337.50	9752.06
981	8126.06	9992.63	10491.79	10342.36	9755.84
982	8132.55	9151.44	10497.48	10347.10	9759.44
983	8139.39	9158.03	10503.13	10351.74	9762.91
984	8146.51	9164.73	10005.16	10508.76	9766.26
985	7214.31	8153.84	10011.46	10356.31	8672.40
986	7222.28	8161.29	10017.78	10360.83	8674.29
987	7230.32	8168.79	10024.10	10365.34	9772.82
988	7238.28	8176.24	10030.42	10525.57	8676.16
989	7246.04	8183.56	9198.87	10036.72	10379.09
990	7253.47	8190.66	9205.57	10043.00	10383.84
991	7260.43	8197.47	9212.14	10049.24	9786.57
992	7268.81	8203.91	9218.56	10055.43	10388.71
993	7272.55	8209.93	9224.80	10061.56	10554.01
994	7277.34	8215.31	9230.69	10067.54	10559.79
995	7281.27	8220.05	9236.19	10073.33	10565.57
996	7284.64	8224.37	9241.39	10078.96	10571.32
997	7287.48	8228.26	9246.28	10084.40	10577.02
998	7289.82	8231.72	9250.85	10089.64	10582.65
999	7291.69	8234.76	9255.08	10094.67	10588.20
2000	7293.12	8237.40	9258.97	10099.46	10593.64
2001	7294.19	8239.66	9262.54	10104.01	10598.96
2002	7295.48	8243.21	9268.68	10112.37	10609.18
2003	7295.95	8244.63	9271.29	10116.17	10614.08
2004	7296.40	8245.89	9273.62	10119.74	10618.83
2005	7296.86	8247.02	9275.71	10123.11	10623.45
2006	7297.31	8248.03	9277.61	10126.30	10627.95
2007	7297.74	8248.96	9279.36	10129.36	10632.36
2008	7298.16	8249.82	9281.01	10132.34	10636.72
2009	7298.58	8250.67	9282.63	10135.29	10641.05

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
1980	5788.374	5882.35	6446.09	7516.34	8704.34
1981	5788.774	5882.58	6446.55	7517.68	8706.82
1982	5789.173	5882.82	6447.00	7518.90	8709.08
1983	5789.569	5883.09	6447.45	7520.02	8711.16
1984	5789.963	5883.37	6447.91	7521.06	8713.11
1985	5790.355	5883.66	6448.35	7522.06	8714.98
1986	5790.747	5883.94	6448.79	7523.04	8716.83
1987	5791.139	5884.22	6449.24	7524.03	8718.70
1988	5791.533	5884.50	6449.69	7525.08	8720.66
1989	5791.930	5884.77	6450.14	7526.21	8722.76
1990	5792.329	5885.01	6450.60	7527.43	8725.04
1991	5792.729	5885.24	6451.06	7528.79	8727.55
1992	5793.132	5885.45	6451.55	7530.32	8730.33
1993	5793.497	5885.74	6452.29	7532.23	8733.56
1994	5793.882	5886.26	6453.48	7534.64	8737.26
1995	5794.457	5887.07	6455.06	7537.43	8741.30
1996	5795.390	5888.30	6457.09	7540.63	8745.68
1997	5796.813	5890.03	6459.60	7544.25	8750.38
1998	5798.837	5892.33	6462.63	7548.30	8755.41
1999	5801.586	5895.31	6466.21	7552.80	8760.76
2000	5805.227	5899.04	6470.37	7557.74	8766.40
2001	5809.843	5903.61	6475.13	7563.12	8772.32
2002	5815.415	5909.01	6480.54	7568.94	8778.49
2003	5821.826	5915.26	6486.66	7575.24	8784.88
2004	5828.988	5922.27	6493.47	7581.97	8791.46
2005	5836.798	5929.96	6500.89	7589.10	8798.21
2006	5845.133	5938.20	6508.80	7596.54	8805.08
2007	5853.859	5946.84	6517.06	7604.21	8812.05
2008	5862.830	5955.73	6525.54	7612.02	8819.09
2009	5871.900	5964.73	6534.12	7619.88	8826.14

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
1980	8194.10	7248.85	6629.78	6699.02
1981	8200.56	7255.56	6636.63	6705.68
1982	8207.29	7262.72	6644.05	6712.94
1983	8214.24	7270.24	6651.95	6720.70
1984	8221.36	7278.03	6660.20	6728.83
1985	8228.58	7285.99	6668.66	6737.17
1986	8235.84	7294.00	6677.19	6745.58
1987	8243.05	7301.96	6685.64	6753.91
1988	8250.16	7309.74	6693.87	6762.01
1989	8257.10	7317.24	6701.74	6769.74
1990	8263.80	7324.35	6709.11	6776.95
1991	8270.22	7330.99	6715.86	6783.52
1992	8276.31	7337.08	6721.89	6789.34
1993	8281.85	7342.17	6726.61	6793.98
1994	8286.77	7346.18	6729.94	6797.43
1995	8291.27	7349.52	6732.46	6800.17
1996	8295.35	7352.27	6734.29	6802.28
1997	8299.00	7354.51	6735.56	6803.84
1998	8302.23	7356.30	6736.37	6804.92
1999	8305.06	7357.74	6736.85	6805.62
2000	8307.51	7358.94	6737.22	6806.06
2001	8309.60	7359.99	6737.58	6806.36
2002	8311.37	7360.93	6737.98	6806.58
2003	8312.83	7361.72	6738.38	6806.80
2004	8314.04	7362.39	6738.78	6807.03
2005	8315.03	7362.96	6739.18	6807.30
2006	8315.85	7363.44	6739.57	6807.58
2007	8316.55	7363.86	6739.96	6807.87
2008	8317.18	7364.25	6740.35	6808.16
2009	8317.78	7364.62	6740.73	6808.46

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
2010	7299.00	8251.53	9284.27	10138.26	10645.40
2011	7299.43	8252.43	9285.99	10141.29	10649.79
2012	7299.88	8253.41	9287.83	10144.44	10654.27
2013	7300.33	8254.50	9289.86	10147.75	10658.84
2014	7300.79	8255.71	9292.09	10151.24	10663.54
2015	7301.25	8257.05	9294.58	10154.93	10668.37
2016	7301.78	8258.67	9297.47	10158.97	10673.41
2017	7302.50	8260.55	9300.67	10163.24	10678.57
2018	7303.49	8262.74	9304.15	10167.74	10683.87
2019	7304.80	8265.25	9307.94	10172.45	10689.27
2020	7306.46	8268.10	9312.01	10177.37	10694.77
2021	7308.49	8271.29	9316.36	10182.48	10700.35
2022	7310.90	8274.82	9320.98	10187.75	10705.99
2023	7313.70	8278.66	9325.84	10193.18	10711.68
2024	7316.87	8282.82	9330.93	10198.74	10717.42
2025	7320.39	8287.25	9336.21	10204.41	10723.17
2026	7324.22	8291.92	9341.66	10210.17	10728.95
2027	7328.32	8296.80	9347.24	10216.01	10734.73
2028	7332.62	8301.82	9352.92	10221.89	10740.51
2029	7337.06	8306.95	9358.66	10227.80	10746.30
2030	7341.56	8312.12	9364.43	10233.73	10752.08
2031	7346.03	8317.27	9370.19	10239.65	10757.86
2032	7350.39	8322.34	9375.90	10245.54	10763.65
2033	7354.58	8327.28	9381.52	10251.40	10769.43
2034	7358.51	8332.03	9387.02	10257.19	10775.20
2035	7362.14	8336.55	9392.36	10262.89	10780.97
2036	7365.41	8340.78	9397.51	10268.49	10786.71
2037	7368.30	8344.71	9402.43	10273.95	10792.42
2038	7370.79	8348.30	9407.09	10279.25	10798.07
2039	7372.86	8351.53	9411.48	10284.38	10803.66

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
2010	5880.916	5973.66	6542.64	7627.72	8833.19
2011	5889.728	5982.39	6550.98	7635.44	8840.18
2012	5898.198	5990.77	6559.01	7642.95	8847.09
2013	5906.199	5998.66	6566.61	7650.20	8853.88
2014	5913.619	6005.95	6573.66	7657.09	8860.53
2015	5920.375	6012.54	6580.10	7663.58	8867.00
2016	5925.986	6017.99	6585.53	7669.43	8873.19
2017	5930.720	6022.65	6590.37	7674.86	8879.14
2018	5934.573	6026.57	6594.66	7679.90	8884.84
2019	5937.595	6029.78	6598.43	7684.55	8890.29
2020	5939.946	6032.40	6601.72	7688.81	8895.48
2021	5941.739	6034.48	6604.56	7692.71	8900.39
2022	5943.079	6036.13	6606.99	7696.26	8905.04
2023	5944.049	6037.39	6609.06	7699.49	8909.44
2024	5944.744	6038.35	6610.80	7702.43	8913.61
2025	5945.249	6039.07	6612.28	7705.12	8917.56
2026	5945.649	6039.64	6613.54	7707.60	8921.33
2027	5946.015	6040.09	6614.63	7709.90	8924.94
2028	5946.371	6040.49	6615.59	7712.07	8928.43
2029	5946.725	6040.84	6616.49	7714.17	8931.84
2030	5947.080	6041.19	6617.35	7716.23	8935.23
2031	5947.435	6041.54	6618.23	7718.30	8938.63
2032	5947.789	6041.91	6619.16	7720.44	8942.08
2033	5948.149	6042.34	6620.20	7722.68	8945.64
2034	5948.534	6042.86	6621.39	7725.09	8949.35
2035	5948.993	6043.52	6622.79	7727.71	8953.24
2036	5949.625	6044.41	6624.45	7730.57	8957.34
2037	5950.518	6045.59	6626.43	7733.73	8961.68
2038	5951.780	6047.15	6628.79	7737.22	8966.28
2039	5953.515	6049.19	6631.58	7741.08	8971.17

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
2010	8318.39	7365.01	6741.12	6808.75
2011	8319.07	7365.42	6741.51	6809.04
2012	8319.84	7365.88	6741.90	6809.32
2013	8320.77	7366.41	6742.30	6809.60
2014	8321.89	7367.04	6742.69	6809.84
2015	8323.23	7367.77	6743.09	6810.07
2016	8324.98	7368.71	6743.50	6810.29
2017	8327.04	7369.74	6743.86	6810.57
2018	8329.40	7370.91	6744.22	6810.98
2019	8332.10	7372.24	6744.63	6811.57
2020	8335.14	7373.85	6745.27	6812.46
2021	8338.52	7375.80	6746.23	6813.70
2022	8342.24	7378.11	6747.58	6815.34
2023	8346.28	7380.82	6749.36	6817.40
2024	8350.62	7383.93	6751.60	6819.89
2025	8355.23	7387.44	6754.32	6822.81
2026	8360.09	7391.32	6757.50	6826.14
2027	8365.14	7395.54	6761.10	6829.82
2028	8370.34	7400.03	6765.05	6833.79
2029	8375.64	7404.69	6769.21	6837.95
2030	8380.98	7409.42	6773.48	6842.19
2031	8386.30	7414.12	6777.70	6846.39
2032	8391.54	7418.69	6781.74	6850.45
2033	8396.66	7423.02	6785.49	6854.26
2034	8401.59	7427.03	6788.83	6857.72
2035	8406.28	7430.66	6791.70	6860.77
2036	8410.71	7433.89	6794.07	6863.39
2037	8414.82	7436.70	6795.97	6865.56
2038	8418.60	7439.08	6797.40	6867.28
2039	8422.02	7441.07	6798.40	6868.56

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1	LONGERON 1	ROW 2	LONGERON 2	ROW 3	LONGERON 3	ROW 4	LONGERON 4	ROW 5	LONGERON 5
2040	7374.53	8354.38	9415.56	10289.30	10809.16	10659.58	10057.19	8932.49	7705.66	6635.29
2041	7375.81	8356.87	9419.32	10293.99	10814.55	10665.33	10062.95	8937.90	7710.44	6639.09
2042	7376.72	8358.97	9422.73	10298.44	10819.81	10671.07	10068.86	8943.57	7715.66	6643.64
2043	7377.35	8360.74	9425.80	10302.61	10824.93	10676.79	10074.89	8949.50	7721.33	6649.02
2044	7377.86	8362.27	9428.58	10306.56	10829.91	10682.48	10081.00	8955.63	7727.34	6655.01
2045	7378.31	8363.58	9430.99	10310.20	10834.70	10688.12	10087.21	8962.00	7733.80	6661.77
2046	7378.76	8364.58	9432.87	10313.37	10839.19	10693.63	10093.54	8968.75	7740.95	6669.66
2047	7379.15	8365.28	9434.24	10316.09	10843.36	10698.99	10099.94	8975.87	7748.80	6678.62
2048	7379.51	8365.81	9435.34	10318.55	10847.32	10704.25	10106.39	8983.26	7757.13	6688.26
2049	7379.85	8366.22	9436.22	10320.78	10851.09	10709.40	10112.87	8990.90	7765.95	6698.52
2050	7380.17	8366.52	9436.94	10322.83	10854.70	10714.46	10119.38	8998.79	7775.20	6709.31
2051	7380.47	8366.77	9437.55	10324.74	10858.19	10719.44	10125.92	9006.87	7784.79	6720.50
2052	7380.76	8366.98	9438.11	10326.58	10861.60	10724.38	10132.47	9015.07	7794.61	6731.95
2053	7381.05	8367.18	9438.64	10328.41	10864.99	10729.31	10139.02	9023.31	7804.49	6743.47
2054	7381.34	8367.40	9439.21	10330.26	10868.42	10734.26	10145.57	9031.49	7814.25	6754.86
2055	7381.64	8367.66	9439.84	10332.21	10871.94	10739.26	10152.09	9039.52	7823.76	6765.96
2056	7381.96	8367.99	9440.60	10334.30	10875.59	10744.34	10158.60	9047.35	7832.90	6776.62
2057	7382.30	8368.43	9441.53	10336.58	10879.41	10749.52	10165.08	9054.93	7841.60	6786.73
2058	7382.67	8368.99	9442.68	10339.10	10883.41	10754.79	10171.51	9062.26	7849.83	6796.23
2059	7383.07	8369.73	9444.12	10341.87	10887.62	10760.18	10177.91	9069.34	7857.60	6805.06
2060	7383.51	8370.65	9445.86	10344.93	10892.03	10765.66	10184.26	9076.17	7864.91	6813.21
2061	7383.96	8371.77	9447.94	10348.28	10896.64	10771.22	10190.54	9082.78	7871.79	6820.67
2062	7384.42	8373.08	9450.36	10351.93	10901.44	10776.86	10196.75	9089.14	7887.24	6827.42
2063	7384.91	8374.60	9453.12	10355.86	10906.41	10782.54	10202.87	9095.28	7884.28	6833.46
2064	7385.57	8376.39	9456.21	10360.05	10911.53	10788.27	10208.89	9101.19	7889.91	6838.77
2065	7386.47	8378.48	9459.62	10364.49	10916.79	10794.01	10214.80	9106.87	7895.14	6843.35
2066	7387.69	8380.90	9463.32	10369.14	10922.17	10799.76	10220.59	9112.33	7900.00	6847.27
2067	7389.22	8383.63	9467.30	10373.99	10927.63	10805.49	10226.25	9117.55	7904.50	6850.64
2068	7391.07	8386.66	9471.52	10379.01	10933.18	10811.19	10231.79	9122.56	7908.69	6853.57
2069	7393.22	8389.96	9475.96	10384.17	10938.78	10816.86	10237.20	9127.36	7912.60	6856.13

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
2040	5955.851	6051.78	6634.86	7745.33	8976.34
2041	5958.945	6055.06	6638.68	7750.01	8981.81
2042	5963.003	6059.15	6643.09	7755.14	8987.58
2043	5968.121	6064.15	6648.18	7760.75	8993.63
2044	5974.050	6069.91	6653.89	7766.77	8999.90
2045	5980.994	6076.70	6660.49	7773.38	9006.42
2046	5989.393	6085.00	6668.46	7780.85	9013.31
2047	5999.131	6094.68	6677.64	7789.12	9020.55
2048	6009.670	6105.17	6687.55	7797.88	9028.02
2049	6020.915	6116.38	6698.11	7807.08	9035.71
2050	6032.744	6128.19	6709.21	7816.67	9043.61
2051	6045.005	6140.44	6720.71	7826.56	9051.69
2052	6057.527	6152.95	6732.46	7836.63	9059.87
2053	6070.119	6165.53	6744.27	7846.74	9068.08
2054	6082.583	6177.99	6755.96	7856.77	9076.23
2055	6094.740	6190.13	6767.36	7866.59	9084.26
2056	6106.425	6201.79	6778.33	7876.08	9092.11
2057	6117.507	6212.84	6788.74	7885.18	9099.75
2058	6127.880	6223.16	6798.50	7893.83	9107.17
2059	6137.463	6232.68	6807.54	7902.01	9114.36
2060	6146.202	6241.33	6815.82	7909.68	9121.34
2061	6154.049	6249.06	6823.27	7916.83	9128.09
2062	6160.972	6255.83	6829.86	7923.42	9134.61
2063	6166.962	6261.65	6835.61	7929.48	9140.89
2064	6171.992	6266.57	6840.65	7935.05	9146.92
2065	6176.084	6270.69	6845.08	7940.19	9152.70
2066	6179.330	6274.10	6849.00	7944.95	9158.22
2067	6181.902	6276.91	6852.45	7949.34	9163.49
2068	6183.947	6279.24	6855.50	7953.41	9168.54
2069	6185.581	6281.17	6858.20	7957.19	9173.36

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
2040	8425.07	7442.69	6799.04	6869.45
2041	8427.74	7444.01	6799.45	6870.03
2042	8430.03	7445.14	6799.80	6870.39
2043	8431.95	7446.13	6800.18	6870.64
2044	8433.59	7447.01	6800.58	6870.86
2045	8434.86	7447.71	6800.98	6871.09
2046	8435.66	7448.18	6801.38	6871.37
2047	8436.09	7448.47	6801.75	6871.67
2048	8436.35	7448.68	6802.12	6871.98
2049	8436.51	7448.83	6802.46	6872.28
2050	8436.63	7448.97	6802.79	6872.58
2051	8436.74	7449.09	6803.11	6872.87
2052	8436.86	7449.22	6803.42	6873.15
2053	8436.99	7449.35	6803.73	6873.44
2054	8437.10	7449.48	6804.04	6873.72
2055	8437.22	7449.61	6804.36	6874.01
2056	8437.34	7449.75	6804.70	6874.31
2057	8437.52	7449.91	6805.05	6874.61
2058	8437.81	7450.13	6805.42	6874.92
2059	8438.28	7450.44	6805.80	6875.22
2060	8438.97	7450.86	6806.19	6875.50
2061	8439.95	7451.42	6806.58	6875.77
2062	8441.24	7452.13	6806.98	6876.00
2063	8442.85	7453.00	6807.38	6876.22
2064	8444.80	7454.00	6807.76	6876.47
2065	8447.08	7455.12	6808.11	6876.84
2066	8449.69	7456.41	6808.50	6877.37
2067	8452.61	7457.91	6809.05	6878.15
2068	8455.83	7459.69	6809.85	6879.21
2069	8459.32	7461.75	6810.93	6880.57

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
2070	7395.66	8393.50	9480.59	10389.45	10944.42
2071	7398.34	8397.25	9485.37	10394.83	10950.10
2072	7401.21	8401.16	9490.28	10400.29	10955.81
2073	7404.21	8405.18	9495.27	10405.79	10961.52
2074	7407.30	8409.27	9500.31	10411.33	10967.25
2075	7410.40	8413.37	9505.36	10416.86	10972.98
2076	7413.45	8417.43	9510.37	10422.38	10978.70
2077	7416.38	8421.39	9515.32	10427.86	10984.41
2078	7419.14	8425.21	9520.16	10433.28	10990.10
2079	7421.68	8428.83	9524.85	10438.60	10995.76
2080	7423.80	8432.10	9529.26	10443.75	11001.35
2081	7425.44	8434.94	9533.33	10448.66	11006.95
2082	7426.77	8437.47	9537.13	10453.38	11012.26
2083	7427.77	8439.67	9540.63	10457.89	11017.56
2084	7428.49	8441.55	9543.82	10462.16	11022.72
2085	7429.01	8443.13	9546.68	10466.16	11027.74
2086	7429.47	8444.49	9549.18	10469.88	11032.58
2087	7429.93	8445.65	9551.32	10473.29	11037.22
2088	7430.36	8446.59	9553.11	10476.39	11041.66
2089	7430.76	8447.34	9554.56	10479.18	11045.88
2090	7431.13	8447.90	9555.70	10481.67	11049.88
2091	7431.47	8448.30	9556.59	10483.91	11053.65
2092	7431.78	8448.59	9557.27	10485.92	11057.23
2093	7432.07	8448.80	9557.81	10487.74	11060.62
2094	7432.34	8448.95	9558.26	10489.44	11063.89
2095	7432.61	8449.07	9558.66	10491.06	11067.06
2096	7432.87	8449.19	9559.04	10492.66	11070.21
2097	7433.13	8449.32	9559.45	10494.29	11073.41
2098	7433.41	8449.48	9559.91	10496.01	11076.89
2099	7433.70	8449.70	9560.48	10497.88	11080.13

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 6 LONGERON 6	ROW 7 LONGERON 7	ROW 8 LONGERON 8	ROW 9 LONGERON 9	ROW 10 LONGERON 10
2070	6186.900	6282.80	6860.61	7960.73	9178.00
2071	6187.978	6284.17	6862.79	7964.06	9182.48
2072	6188.887	6285.37	6864.79	7967.23	9186.84
2073	6189.691	6286.45	6866.66	7970.30	9191.10
2074	6190.439	6287.47	6868.48	7973.30	9195.32
2075	6191.177	6288.48	6870.28	7976.30	9199.53
2076	6191.952	6289.53	6872.12	7979.33	9203.77
2077	6192.810	6290.67	6874.06	7982.45	9208.08
2078	6193.812	6291.97	6876.16	7985.71	9212.51
2079	6195.025	6293.48	6878.47	7989.16	9217.08
2080	6196.710	6295.47	6881.22	7992.98	9221.93
2081	6199.079	6298.10	6884.52	7997.26	9227.12
2082	6202.066	6301.28	6888.27	8001.89	9232.56
2083	6205.872	6305.16	6892.53	8006.90	9238.25
2084	6210.614	6309.83	6897.37	8012.34	9244.21
2085	6216.348	6315.40	6902.91	8018.25	9250.42
2086	6223.051	6321.94	6909.30	8024.71	9256.89
2087	6230.721	6329.48	6916.58	8031.76	9263.59
2088	6239.341	6338.01	6924.75	8039.36	9270.54
2089	6248.878	6347.48	6933.75	8047.51	9277.72
2090	6259.291	6357.85	6943.54	8056.18	9285.15
2091	6270.519	6369.05	6954.09	8065.38	9292.84
2092	6282.476	6380.98	6965.31	8075.06	9300.79
2093	6295.050	6393.55	6977.10	8085.16	9308.99
2094	6308.090	6406.59	6989.33	8095.60	9317.40
2095	6321.416	6419.91	7001.83	8106.25	9325.94
2096	6334.824	6433.32	7014.40	8116.96	9334.52
2097	6348.101	6446.59	7026.85	8127.58	9343.04
2098	6361.046	6459.54	7039.00	8137.95	9351.41
2099	6373.482	6471.96	7050.66	8147.96	9359.55

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11	LONGERON 11	ROW 12	LONGERON 12	EARTH END	SPACE END
2070	8463.05	7464.09	6812.30	6882.24	4397.37	14313.14
2071	8466.98	7466.67	6813.94	6884.16	4399.58	14320.75
2072	8471.08	7469.45	6815.80	6886.30	4401.78	14328.36
2073	8475.29	7472.39	6817.84	6888.61	4403.98	14335.95
2074	8479.57	7475.41	6819.98	6891.00	4406.19	14343.54
2075	8483.85	7478.44	6822.14	6893.42	4408.39	14351.12
2076	8488.10	7481.42	6824.23	6895.77	4410.59	14358.71
2077	8492.25	7484.28	6826.17	6897.98	4412.79	14366.31
2078	8496.26	7486.95	6827.91	6900.00	4415.00	14373.92
2079	8500.07	7489.38	6829.39	6901.77	4417.20	14381.54
2080	8503.53	7491.40	6830.43	6903.10	4419.41	14389.15
2081	8506.56	7493.01	6831.06	6903.97	4421.61	14396.72
2082	8509.27	7494.35	6831.48	6904.58	4423.80	14404.23
2083	8511.66	7495.53	6831.84	6904.99	4425.97	14411.64
2084	8513.71	7496.56	6832.20	6905.27	4428.13	14418.93
2085	8515.42	7497.47	6832.61	6905.49	4430.27	14426.06
2086	8516.78	7498.22	6833.01	6905.71	4432.38	14432.99
2087	8517.81	7498.80	6833.40	6905.97	4434.47	14439.69
2088	8518.54	7499.24	6833.79	6906.26	4436.53	14446.14
2089	8519.02	7499.56	6834.17	6906.56	4438.55	14452.30
2090	8519.30	7499.77	6834.54	6906.86	4440.56	14458.18
2091	8519.47	7499.93	6834.89	6907.16	4442.54	14463.76
2092	8519.58	7500.06	6835.21	6907.46	4444.51	14469.08
2093	8519.70	7500.19	6835.52	6907.74	4446.47	14474.16
2094	8519.86	7500.34	6835.81	6908.02	4448.43	14479.05
2095	8520.05	7500.49	6836.10	6908.28	4450.39	14483.84
2096	8520.26	7500.66	6836.37	6908.55	4452.35	14488.59
2097	8520.44	7500.81	6836.66	6908.82	4454.31	14493.39
2098	8520.59	7500.95	6836.95	6909.09	4456.27	14498.33
2099	8520.70	7501.08	6837.26	6909.38	4458.24	14503.46

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CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 1 LONGERON 1	ROW 2 LONGERON 2	ROW 3 LONGERON 3	ROW 4 LONGERON 4	ROW 5 LONGERON 5
2100	8450.02	9561.21	10499.94	11083.75	10983.53
2101	8450.46	9562.16	10502.24	11087.59	10988.72
2102	8451.07	9563.38	10504.82	11091.65	10994.03
2103	8451.87	9564.93	10507.70	11095.93	10999.45
2104	8452.89	9566.83	10510.90	11100.44	11004.97
2105	8454.11	9569.10	10511.42	11105.16	11010.57
2106	8455.56	9571.74	10518.25	11110.07	11016.24

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW	6 LONGERON	6	ROW	7 LONGERON	7	ROW	8 LONGERON	8	ROW	9 LONGERON	9	ROW 10 LONGERON	10
2100	6385.265	6483.72	7061.72	8157.52	9367.44	10419.90	11122.23	11136.83	10678.53	9665.48				
2101	6396.285	6494.71	7072.07	8166.58	9375.06	10426.44	11127.61	11140.75	10681.00	9666.60				
2102	6406.458	6504.83	7081.65	8175.11	9382.42	10432.92	11133.09	11144.90	10683.76	9667.95				
2103	6415.725	6514.02	7090.40	8183.09	9389.53	10439.35	11138.67	11149.27	10686.82	9669.58				
2104	6424.042	6522.24	7098.29	8190.52	9396.40	10445.71	11144.34	11153.86	10690.18	9671.53				
2105	6431.372	6529.43	7105.26	8197.36	9403.02	10452.01	11150.08	11158.66	10693.85	9673.83				
2106	6437.697	6535.59	7111.31	8203.60	9409.39	10458.21	11155.87	11163.65	10697.80	9676.49				

CUMULATIVE EQUIVALENT SUN HOURS  
FOR INCIDENT SOLAR + EARTH REFLECTED RADIATION

DAY	ROW 11 LONGERON 11	ROW 12 LONGERON 12	EARTH END	SPACE END
2100	8520.82	7501.22	6837.60	6909.68
2101	8521.01	7501.39	6837.95	6909.98
2102	8521.34	7501.63	6838.32	6910.28
2103	8521.89	7501.98	6838.70	6910.58
2104	8522.71	7502.46	6839.10	6910.86
2105	8523.86	7503.10	6839.49	6911.10
2106	8525.36	7503.91	6839.90	6911.32

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13. ABSTRACT (Maximum 200 words)	Exposure to solar radiation is one of the primary causes of degradation of materials on spacecraft. Accurate knowledge of solar exposure is needed to evaluate the performance of materials carried on the Long Duration Exposure Facility (LDEF) during its nearly 6-year orbital flight. This report presents tables and figures of calculated solar exposure for the experiment rows, longerons, and end bays of the spacecraft as functions of time in orbit. The data reported covers both direct solar and earth reflected radiation. Results are expressed in cumulative equivalent sun hours (CESH) or the hours of direct, zero-incidence solar radiation that would cause the same irradiance of a surface. Space end bays received the most solar radiation, 14,500 CESH; earth end bays received the least, 4,500 CESH. Row locations received between 6,400 CESH and 11,200 CESH with rows facing either eastward or westward receiving the most radiation and rows facing either northward or southward receiving the least.		
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